

SOLICITATION, OFFER, AND AWARD (Construction, Alteration, or Repair)	1. SOLICITATION NO. NNK12435778R	2. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)	3. DATE ISSUED 5/25/2012	PAGE OF PAGES 1 of 137

IMPORTANT — The "offer" section on the reverse must be fully competed by offeror.

4. CONTRACT NO. TBD	5. REQUISITION/PURCHASE REQUEST NO. 4200435778	6. PROJECT NO. Replace Chilled Water Controls, Industrial Area, PCN 97697
------------------------	---------------------------------------------------	---------------------------------------------------------------------------------

7. ISSUED BY: JOHN F. KENNEDY SPACE CENTER, NASA PROCUREMENT OFFICE CODE: OP-CS-A KENNEDY SPACE CENTER, FL 32899	CODE OP-CS-A	8. ADDRESS OFFER TO: JOHN F. KENNEDY SPACE CENTER, NASA PROCUREMENT OFFICE CODE: OP-CS-A Bldg M6-0399, Attn: R. Glanowski KENNEDY SPACE CENTER, FL 32899
-------------------------------------------------------------------------------------------------------------------------------	-----------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------

9. FOR INFORMATION CALL:	A. NAME Robert Glanowski, Contract Specialist	B. TELEPHONE NO. (Include area code) (NO COLLECT CALLS) (321) 867-7345
-----------------------------	--------------------------------------------------	---------------------------------------------------------------------------

SOLICITATION

NOTE: In sealed solicitations "offer" and "offeror" mean "bid" and "bidder".

10. THE GOVERNMENT REQUIRES PERFORMANCE OF THE WORK DESCRIBED IN THESE DOCUMENTS (Title, Identifying no., date):

CLIN 0001 - TASK 1 (Base Bid) – The contractor shall furnish all labor, equipment, materials and related activities necessary for the Replace Chilled Water Controls, Industrial Area, at the Kennedy Space Center, Florida . All work shall be accomplished in accordance with the terms and conditions of Contract TBD (including attachments), wage determination FL120001, dated 01/06/2012, technical specification 79K38826 pages 1 through 204, and Drawings 79K38825, sheets 1 through 94.

CLIN 0002 - OPTION 1 – Relocate Loop Chilled Water Control Valves

CLIN 0003 - OPTION 2 – Design-Build Replacement of Eight (8) 100 Horsepower Variable Speed Motor Drives

CLIN 0004 - OPTION 3 – Upgrade Four (4) York Chiller Control Plants

OFFEROR'S NOTE: See Article I.12, "OPTION FOR INCREASED CONSTRUCTION PERFORMANCE" for information regarding the periods during which the Government may exercise options 1 through 3.

OFFEROR'S NOTE: See Article F.1b, "FAR 52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984)" for information regarding the performance periods for the base bid and options 1 through 3.

11. The Contractor shall begin performance within (*) calendar days and complete it within (*) calendar days after receiving [] award, [X] notice to proceed. This performance period is [X] mandatory, [] negotiable (See *See Article F.1b.)

12A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS. (If "YES," indicate within how many calendar days after award in item 12B.) YES	12B. CALENDAR DAYS 10 calendar days
---------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------

13. ADDITIONAL SOLICITATION REQUIREMENTS:

A. Sealed offers in original and (2) copies to perform the work required are due at the place specified in Item 8 by **3:00 pm** local time **06/26/2012**. If this is a sealed bid solicitation, offers will be publicly opened at that time. Sealed envelopes containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due

B. An offer guaranteed [X] is not required.

C. All offers are subject to the (1) work requirements, and (2) other provisions and clauses incorporated in the solicitation in full text or by reference.

D. Offers providing less than **60** calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.

OFFER (Must be fully completed by offeror)

14. NAME AND ADDRESS OF OFFEROR (Include ZIP Code)	15. TELEPHONE NO. (Include area code)
	16. REMITTANCE ADDRESS (Include only if different than item 14)
CODE	FACILITY CODE

17. The offeror agrees to perform the work required at the prices below in strict accordance with the terms of this solicitation, if this offer is accepted by the Government in writing within _____ calendar days after the date offers are due. (Insert any number equal to or greater than the minimum requirement stated in Item 13D. Failure to insert any number means the offeror accepts the minimum in Item 13D.)

See Attached

AMOUNTS

18. The offeror agrees to furnish any required performance and payment bonds.

19. ACKNOWLEDGEMENT OF AMENDMENTS

(The offeror acknowledges receipt of amendments to the solicitation - give number and date of each)

AMENDMENT NO.										
DATE										

20A. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER
(Type or Print)

20 B. SIGNATURE

20C. OFFER DATE

AWARD (To be completed by Government)

21. ITEMS ACCEPTED: See Attached

22. AMOUNT (TOTAL CONTRACT AWARD) \$ _____	23. ACCOUNTING AND APPROPRIATION DATA 4200418184
---------------------------------------------------	---------------------------------------------------------

24. SUBMIT INVOICE TO ADDRESS SHOWN IN (4 copies unless otherwise specified)	ITEM 27	25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO [] 10 U.S.C. 2304(c) () [] 41 U.S.C. 253(c) ()
---------------------------------------------------------------------------------	------------	------------------------------------------------------------------------------------------------------------

26. ADMINISTERED BY JOHN F. KENNEDY SPACE CENTER, NASA PROCUREMENT OFFICE CODE: OP-CS-B KENNEDY SPACE CENTER, FL 32899	27. PAYMENT WILL BE MADE BY NASA Shared Services Center (NSSC) Financial Management Division (FMD) – Accounts Payable Bldg 1111, C. Road Stennis Space Center, MS 39529
------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

CONTRACTING OFFICER WILL COMPLET ITEM 28 OR 29 AS APPLICABLE

[] 28. NEGOTIATED AGREEMENT Contractor is required to sign this document and return _____ copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all work requirements identified on this form and any continuation sheets for the consideration stated in this contract. The rights and obligations of the parties to this contract shall be governed by (a) this contract award, (b) the solicitation, (c) the clauses, representations, certifications, and specifications incorporated by reference in or attached to this contract.	[] 29. AWARD (Contractor is not required to sign this document.) Your offer on this solicitation is hereby accepted as to the items listed. This award consummates the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document necessary.
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

30A. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN (Type or Print)	31A. NAME OF CONTRACTING OFFICER (Type or Print)
30B. SIGNATURE	30C. DATE
	31B. UNITED STATES OF AMERICA BY
	31C. AWARD DATE

SF1442 BACK, Block 17 continued.

17. The offeror agrees to perform the work required at the prices below in strict accordance with the terms of this solicitation, if this offer is accepted by the Government in writing within _____ calendar days after the date offers are due. *(Insert any number equal to or greater than the minimum requirement stated in Item 13D. Failure to insert any number means the offeror accepts the minimum in Item 13D.)*

CLIN	DESCRIPTION	UNIT	UNIT PRICE
0001	TASK 1 (Base Bid) Replace Chilled Water Controls, Industrial Area	1 JOB	\$ _____
0002	OPTION 1 Relocate Loop Chilled Water Control Valves	1 JOB	\$ _____
0003	OPTION 2 Design-Build Replacement of Eight (8) 100 Horsepower Variable Speed Motor Drives	1 JOB	\$ _____
0004	OPTION 3 Upgrade Four (4) York Chiller Control Plants	1 JOB	\$ _____
TOTAL			\$ _____

AWARD (To be completed by the Government)

SF1442 BACK, Block 21 continued.

21. ITEMS ACCEPTED:

CLIN	DESCRIPTION	UNIT	UNIT PRICE
0001	TASK 1 (Base Bid) Replace Chilled Water Controls, Industrial Area	1 JOB	\$ _____
0002	OPTION 1 Relocate Loop Chilled Water Control Valves	1 JOB	\$ _____
0003	OPTION 2 Design-Build Replacement of Eight (8) 100 Horsepower Variable Speed Motor Drives	1 JOB	\$ _____
0004	OPTION 3 Upgrade Four (4) York Chiller Control Plants	1 JOB	\$ _____
TOTAL			\$ _____

**NASA/KSC SOLICITATION NNK12435778R
TABLE OF CONTENTS**

SECTION A	SOLICITATION/CONTRACT FORM (SF1442)
SECTION B	SUPPLIES OR SERVICES AND PRICE/COSTS
SECTION C	DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK
SECTION D	PACKAGING AND MARKING
SECTION E	INSPECTION AND ACCEPTANCE
SECTION F	DELIVERIES OR PERFORMANCE
SECTION G	CONTRACT ADMINISTRATION DATA
SECTION H	SPECIAL CONTRACT REQUIREMENTS
SECTION I	CONTRACT CLAUSES
SECTION J	LIST OF ATTACHMENTS
SECTION K	REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF OFFERORS OR RESPONDENTS
SECTION L	INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS OR RESPONDENTS
SECTION M	EVALUATION FACTORS FOR AWARD

NASA/KSC SOLICITATION NNK12435778R
SECTION B – SUPPLIES OR SERVICES AND PRICES/COSTS

B.1 CONSTRUCTION SERVICES AND PRICES

<u>Line Item</u>	<u>Description</u>	<u>Unit</u>	<u>Total</u>
0001	Task 1 – Replace Chilled Water Controls, Industrial Area	Job	\$_____
0002	Option 1 – Relocate Loop Chilled Water Control Valves	Job	\$_____
0003	Option 2 – Design-Build Replacement of Eight (8) 100 Horsepower Variable Speed Motor Drives	Job	\$_____
0004	Option 3 – Upgrade Four (4) York Chiller Control Plants	Job	\$_____

TOTAL \$_____

B. 2 NFS 1852.216-78 FIRM FIXED PRICE (DEC 1988)

The total firm fixed price of this contract is **TBD**.

B.3 PROJECT DELIVERABLES

Incidental deliverables (manuals, reports, plans, and other written documentation) to be provided under this contract are identified in Section J, Attachment J-A, Project Deliverables. The costs associated with providing the data in Attachment J-A is included in the firm-fixed price of the awarded contract. Nothing contained in Attachment J-A shall relieve the Contractor from furnishing data called for by, or under the authority of, other provisions of this contract, which are not identified and described in Attachment J-A.

NASA/KSC SOLICITATION NNK12435778R
SECTION C – DESCRIPTION/SPECIFICATION/WORK STATEMENT

C. 1 SCOPE OF WORK

The Contractor shall furnish all management, supervision, labor, transportation, facilities, materials, tools, disposal, coordination of subcontractors, documentation, and equipment (except any property including utilities as may be specified in the Schedule to be Government-Furnished) and perform all work for the Task(s) named below, and as defined in the Technical Documentation listed below entitled "Contract Drawings, Maps and Specifications," and in accordance with the terms and conditions of this Contract, and within the performance schedule set forth in FAR clause 52.211-10 entitled "Commencement, Prosecution, and Completion of Work." This project involves work in more than one location. The contractor shall have adequate manpower and resources to perform work at multiple locations simultaneously.

<u>Line Item</u>	<u>Description</u>
0001	Task 1 – Replace Chilled Water Controls, Industrial Area
0002	Option 1 – Relocate Loop Chilled Water Control Valves
0003	Option 2 – Design-Build Replacement of Eight (8) 100 Horsepower Variable Speed Motor Drives
0004	Option 3 – Upgrade Four (4) York Chiller Control Plants

C. 2 CONTRACT DRAWINGS, MAPS AND SPECIFICATIONS

(a) Five sets of full scale contract drawings, maps and specifications, (excluding applicable publications incorporated into the technical provisions by reference), plus one CD or DVD containing electronic, portable document format (PDF) versions, will be furnished at award to the Contractor without charge. The work shall conform to the following contract drawings, maps and specifications, attached hereto and made a part hereof:

Specification 79K38826, titled "Design to Replace Chilled Water Controls Industrial Area", dated 9/9/2011, pages 1 through 204.

Specification, section 26 29 23, titled "Variable Frequency Drive Systems under 600 volts", dated 04/06, pages 1 through 17.

Drawing 79K38825, titled "Design to Replace Chilled Water Controls Industrial Area", dated 9/9/2011, pages 1 through 94.

Requirements Document, titled "Replace Chilled Water Controls, Industrial Area", dated 9/9/2011, pages 1 through 18.

NASA/KSC SOLICITATION NNK12435778R
SECTION C – DESCRIPTION/SPECIFICATION/WORK STATEMENT

(b) Addenda to Specifications and Drawings:

b.1 Drawing 79K38825, Sheet 4 (V-04), Zone E3. Fixed Price Option FPO-2 is added to the Drawing Note Fixed Price Bid Options (FPO) as follows:

“FPO-2 Design-build to replace eight (8) existing 100 Horsepower variable speed motor drives with new per Specification Section 26 29 23.”

b.2 Drawing 79K38825, Sheet 4 (V-04), Zone E3. Fixed Price Option FPO-3 is added to the Drawing Note Fixed Price Bid Options (FPO) as follows:

FPO-3 - Contractor shall provide labor and technical expertise to upgrade the chiller controls panels on existing four (4) York YK chillers at the Industrial Area Chiller Plant (herein refer to as IACP).

A. The existing chillers, commonly known as Chillers 3-6, are currently being controlled via the original York Millennium control panels. These panels shall be removed and replaced with the newer York Optiview graphic control panels. The existing chiller control panels are co-located with the chillers in the IACP. Reference 79K38825 for the control panel locations. The serial numbers for the existing control panels are as follows:

Chiller #3	00432H0896
Chiller #4	00800H0896
Chiller #5	01044H0796
Chiller #6	00801H0896

B. The contractor shall provide all the material labor and technical expertise required to provide a complete working system that is integrated with both the existing chiller control system and the IACP Supervisor Control And Data Acquisition System (SCADA). This includes but not limited to demolition, installation, programming, system check out and commissioning. The contractor shall submit a detailed materials list, installation plan, system checkout plan and commissioning plan for approval by the government prior to start of construction. Two construction meetings will be held at KSC prior to the start of the first chiller control panel upgrade. The first meeting will be a kickoff meeting to review the overall requirements and include a walk down of the existing chillers. The second meeting will be scheduled with 14 days after the shop drawings have been submitted to review the installation and testing approach.

C. The base contract requires integrating the existing Millennium control panels to the IACP SCADA system via a York E-Link card and a protocol gateway. Reference 79K38825 sheet I-49 (note B), I-63, and I-68 for installation details and the I/O points that will be integrated to the IACP SCADA. The contractor shall use the base design to integrate the new control panels into the IACP SCADA. If any changes to the base design are required (hardware, software or I/O point modifications) as a result of

NASA/KSC SOLICITATION NNK12435778R
SECTION C – DESCRIPTION/SPECIFICATION/WORK STATEMENT

installing the new control panels, the contractor shall provide a detailed shop drawing depicting the changes for approval by the government prior to the start of construction.

- D. Removal and recharge of the refrigerant shall be the responsibility of the government.
- E. The contractor shall provide 3, 4 hour training classes for technicians and engineering personnel after the conversion of the first chiller. One training class will be held on second shift for the technicians.
- F. The contractor shall provide the following submittals for approval by the government prior to the start of construction:
 - York qualification certificates for all personnel working on the job
 - Shop drawings detailing materials and installation details
 - Shop drawings depicting any deviations to the base contract IACP SCADA interface
 - System checkout plan
 - Commissioning plan
 - Training plan
 - O&M manuals
- G. Submit submittals in accordance with 79K38826 section 01 33 00. At the completion of the project, submit as-built drawings of all submittals in both hard copy and digital media in PDF format.
- H. The chiller upgrades shall be performed one chiller at a time. Each chiller shall be operated for a minimum of 168 hours prior to upgrading the next one.
- I. The schedule for the project will start on the Option 3 award date and will follow the phasing plan for the overall project as shown on 79K38825, Sheet V-04.

(c) "Or Equal" Items"

Throughout the Technical Specifications and on the drawings of this contract, where certain manufacturers' trade names and model numbers are specified and followed by the term "or equal," the manufacturer's name and data as specified shall represent the minimum standard type, quality, and capacity acceptable for incorporation into the work covered by this contract. The products of other manufacturers will be considered as being acceptable, provided that such products fully meet or exceed all minimum structural or use and operational features of the particular manufacturers' items as specified, and provided that the other manufacturers' items is easily interchangeable and can be adequately incorporated within the allocated space in the building or structure. In all cases, the acceptability of "or equal" items shall be at the Contracting Officer's discretion, based upon approval data submitted by the Contractor in accordance with the requirements under Shop Drawings herein.

- (d) Omissions from the drawings or specifications, or the omission or misdescription of details of work

NASA/KSC SOLICITATION NNK12435778R
SECTION C – DESCRIPTION/SPECIFICATION/WORK STATEMENT

which are manifestly necessary to carry out the intent of the drawings and specifications, or which are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of the work but they shall be performed as if fully and correctly set forth and described in the drawings and specifications.

(e) The Contractor shall check all drawings furnished him immediately upon their receipt and shall promptly notify the Contracting Officer of any discrepancies. Figures marked on drawings shall in general be followed in preference to scale measurements. Large scale drawings shall in general govern small scale drawings. The Contractor shall compare all drawings and verify the figures before laying out the work and will be responsible for any errors which might have been avoided thereby.

C. 3 REQUEST FOR INFORMATION/CLARIFICATION (RFIC)

The Contractor shall promptly report to the Contracting Officer all problems or conflicting technical information encountered during the contract performance so that the Government may provide solutions or appropriate direction. Such problems shall be reported on KSC Form No. 8-268, "Request for Information/Clarification," to be provided by the Government. A copy of each RFIC will be provided to the Contracting Officer's Technical Representative (COTR) concurrently with the transmittal to the Contracting Officer. The Contractor shall log and control each Request for Information/Clarification (RFIC), including those generated by subcontractors.

C. 4 DEVIATIONS AND WAIVERS

- (a) When the Contractor proposes to perform work which does not conform to the requirements of the applicable contract drawings and specifications, the Contractor shall submit to the Contracting Officer for approval, a written request for deviation or request for waiver on the nonconforming work.
- (b) All requests by the Contractor shall be submitted on KSC Form 8-69 (Contractor Request to Use Nonconforming Parts or Material) fully executed including an offer of consideration to the Government. The request must be technically supported by justification, rationale, design considerations, calculations and other data which permits ready and conclusive evaluation by the Government as to acceptability or non-acceptability.
- (a) Where a requested deviation or waiver on a particular aspect of the work has a relation to, or affects, other aspects of the work, those other aspects of the work shall be clearly identified and referenced. And, if the requested deviation or waiver necessitates a deviation or waiver on other aspects, requests for all such deviations and waivers must be submitted concurrently.
- (d) Any request not submitted in strict accordance with this provision will not be considered.

NASA/KSC SOLICITATION NNK12435778R
SECTION D – PACKAGING AND MARKING

NOT APPLICABLE TO THIS CONTRACT

NASA/KSC SOLICITATION NNK12435778R
SECTION E - INSPECTION AND ACCEPTANCE

E. 1 LISTING OF FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)
CLAUSES INCORPORATED BY REFERENCE

FAR 52.246-12 INSPECTION OF CONSTRUCTION (AUG 1996)

E. 2 NASA FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 18)
CLAUSES INCORPORATED BY REFERENCE

NFS 1852.246-72 MATERIAL INSPECTION AND RECEIVING REPORT (AUG 2003)

Fill in: (a) At the time of each delivery to the Government under this contract, the Contractor shall furnish a Material Inspection and Receiving Report (DD Form 250 series) prepared in three copies, an original and two copies.

E. 3 BASIC INSPECTION SYSTEM

Pursuant to FAR Clause 52.246-12, entitled "Inspection of Construction," the Contractor shall maintain and implement a basic inspection system as identified below:

(a) Definitions:

"Inspection" means examining and testing supplies or services (including, when appropriate, raw materials, components, and intermediate assemblies) to determine whether they conform to contract requirements.

"Testing" means that element of inspection that determines the properties or elements, including functional operation of supplies or their components, by the application of established scientific principles and procedures.

"Independent Testing Laboratory" means an independent organization, accepted by the Contracting Officer, engaged to perform specific inspections or tests of the work, either at the site or elsewhere, and report the results of these inspections or tests.

- (b) The inspection system shall be documented to ensure and provide objective evidence of quality control in the form of records of inspections and test results. The system shall also ensure that nonconforming articles or materials are discovered, documented, and controlled through effective remedial and preventive actions.

The Contractor may use, at his option, in whole or in part, his existing higher level inspection system or quality assurance program provided such system is revised and identified to the requirements below.

- (c) The Contractor shall provide a narrative description of an inspection system which provides for compliance with the quality requirements and technical criteria of the

NASA/KSC SOLICITATION NNK12435778R
SECTION E - INSPECTION AND ACCEPTANCE

contract.

- (1) The description shall be submitted for review by the Contracting Officer not later than 7 days after contract award.
 - (2) The description shall address each of the Basic Inspection System Requirements identified in paragraph (d) below. This submittal shall address both the general inspection system that will be used during the performance of all work under the contract, including but not limited to those items identified under paragraphs d(1), d(2)(iv), d(2)(v), and d(2)(vi) below.
- (d) Basic Inspection System Requirements: The Contractor shall describe how each of the following requirements is to be satisfied and what records will be maintained, both on-site and offsite.
- (1) The Contractor shall identify the individual responsible for on-site contact and communication relative to implementation and operation of the inspection system. The name of this individual shall be provided, in writing, to the Contracting Officer's Technical Representative (COTR).
 - (2) Standard requirements:
 - (i) A purchasing control system which ensures that all purchasing documents, including those of subcontractors and suppliers, are traceable to the drawings, specifications, and approved submittal requirements.
 - (ii) A receiving inspection system with documented evidence of Contractor inspection traceable to the procurement documents.
 - (iii) A system of controls and records for handling, recording, identification and disposition of nonconforming articles and materials.
 - (iv) A system of identification of inspections required by each specific section of the specifications and drawings and what records will be maintained.
 - (v) Identification of tests to be performed, including test procedures, test records, and the independent testing organization(s) be utilized.
 - (vi) Additional requirements (if included in the drawings, specifications, or contract provisions):
 - (A) Certification or recertification of personnel and qualification of procedures.

NASA/KSC SOLICITATION NNK12435778R
SECTION E - INSPECTION AND ACCEPTANCE

(B) Management and accountability of Government furnished equipment, components, or materials.

(C) Calibration of inspection test gages, tools, measuring instruments, and independent laboratories to be utilized.

E. 4 SYSTEMS ACCEPTANCE AND TESTING

Pursuant to FAR 52.246-12 "Inspection of Construction"; systems tests shall be performed as described below.

(a) SYSTEMS

Systems tests shall be performed on fire protection, fire suppression, HVAC, compressed air and all other assemblies of components which must be tested as an inter-related whole to verify proper functioning.

(b) SYSTEM TEST PROCEDURES

A test procedure and a recording form which documents every step of the system test shall be submitted for approval under the terms of the "Shop Drawings" clause of this contract. Test procedures must be approved prior to requesting a date for testing. Each step in the test procedure shall be witnessed by the Contracting Officer's Representative who shall then date and sign the approved recording form for each step witnessed.

The procedure shall consist of step by step instructions for testing all specified system parameters, system components, and proper overall functioning of the system.

(c) SYSTEM TESTING AND ACCEPTANCE

The following tests shall be performed by the Contractor in strict accordance to the approved test procedure described above.

- (1) Functional Test -- This shall be an "in house" test to verify proper installation and functioning of the system and its components. This functional test shall be performed in the presence of Government inspectors and shall be repeated until the Contractor can perform one full test without device or system malfunction.
- (2) System Acceptance Test -- After successful completion of the functional testing the system shall be tested formally with full documentation using the previously approved recording form. The Contractor shall notify the Contracting Officer, in writing, forty eight (48) hours prior to system acceptance testing. The appointed Contracting Officer Representative will witness, date and stamp each

NASA/KSC SOLICITATION NNK12435778R
SECTION E - INSPECTION AND ACCEPTANCE

test in the procedure. Acceptance of the system will be based upon the written approval of the Contracting Officer Technical Representative.

Note: For work involving fire detection and suppression systems, additional testing & acceptance requirements are described in project technical specifications

The contractor shall use the following form for transfer of fire alarm / fire suppression systems from the government to the contractor:

NASA/KSC SOLICITATION NNK12435778R
SECTION E - INSPECTION AND ACCEPTANCE

KSC - TRANSFER OF RESPONSIBILITY

FROM:

ISC FIRE PROTECTIVE SYSTEMS – KSC , K6-1446A / KSC-326 Ph. 321-861-4681 / 4683

TO: _____ COMPANY: _____ EFFECTIVE DATE: _____

ADDRESS _____ PHONE # _____

EMERGENCY CONTACT: _____ PHONE # _____

SYSTEM: _____

WON #: _____

SYSTEM STATUS: ☐ OPERATIONAL ☐ * PARTIALLY FUNCTIONAL ☐ * OUT OF SERVICE
(* Indicate Below)

TRANSFER OF: ☐ ENTIRE SYSTEM ☐ *PARTIAL (Explain Below)

REASON FOR TRANSFER:

CONDITIONS OF TRANSFER: The assignee agrees to the responsibility of the following:
Coordination of work on the transferred system described above with the COTR. Assignee is responsible for documenting existing system condition prior to transfer. Assignee also agrees to implement safety plans and alternate workaround procedures that facilitate reporting of emergency/fire/security situations, when applicable. The assignee will assure that any and all modifications, installations and changes to the system are in compliance with the contract documents. The assignee assumes responsibility for returning the system/equipment in an operationally ready state and agrees to demonstrate through functional test, that the system has been installed in accordance with contract specifications and drawings.

Name: _____ Signature: _____ Dated: _____
[Assignee]

Name: _____ Signature: _____ Dated: _____
[ISC Fire Protective Systems Representative]

Name: _____ Signature: _____ Dated: _____
[COTR]

NOTE: A COPY OF THIS TRANSFER SHALL BE POSTED IN OR ATTACHED TO THE SYSTEM/EQUIPMENT BEING TRANSFERRED.

**NASA/KSC SOLICITATION NNK12435778R
SECTION E - INSPECTION AND ACCEPTANCE**

The contractor shall use the following form to communicate readiness for Preliminary Fire Alarm Testing:

CONTRACTOR READINESS AFFIRMATION – For “Preliminary” Fire Alarm Testing
NASA Contract Number: _____

Instructions: General Contractor is responsible to ensure the fire alarm system is “ready” for formal preliminary testing. Circle the proper response and write the date completed. Any ‘No’ response would typically prevent submission of the form.

CONTRACT #: _____ **LOCATION/FACILITY:** _____ **FACILITY #** _____

(circle) Date

- | | |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Yes No N/A _____ | Conduit & wiring is complete. Includes continuity/insulation resistance tests & wiring labeling. |
| Yes No N/A _____ | All fire alarm devices are installed. |
| Yes No N/A _____ | Auxiliary functions are connected and known to be operational. Example: AHU shutdown |
| Yes No N/A _____ | Fire alarm panel program, specific to this job, is loaded and operational. |
| Yes No N/A _____ | All troubles, ground faults, etc. have been removed; system is effectively NORMAL. |
| Yes No N/A _____ | Fire alarm vendor/subcontractor conducted a “contractor checkout” of the fire alarm system, with completion on this date: _____ which included testing of a sample of inputs and outputs. <i>Example: rang bells to verify operation in temporal- three pattern, tested 5% of all devices, verified AHU shutdown, verified FACP switched to battery upon loss of 120VAC, etc.</i> |
| Yes No N/A _____ | NFPA 72 Record of Completion form is started for the installation. |
| Yes No N/A _____ | System drawings are available for addition of “red-lines” |
| Yes No N/A _____ | Support needed for successful completion of the Preliminary Test has been identified in writing to the Contracting Officer. <i>Examples: support to test existing fire suppressions systems, elevator crew support, HVAC crew support, security system crew support to verify mag-locks are de-energized, etc.</i> |

The undersigned attests that the subject fire alarm system is ready for PRELIMINARY TEST;

Name: _____ Signature: _____
[Prime Contractor Representative]

Form Completion Date: _____ Proposed Preliminary Test Date(s): _____

Transmit this form per submittal schedule in the contract.

NASA/KSC SOLICITATION NNK12435778R
SECTION E - INSPECTION AND ACCEPTANCE

Nothing in this clause shall relieve the requirements of FAR 52.246-12, "Inspection of Construction."

E. 5 FINAL INSPECTION AND ACCEPTANCE

Final inspection and acceptance of all work under this contract will be conducted by the Contracting Officer's Technical Representative (COTR). Upon satisfactory completion of the contract, the Contractor shall be paid the fixed-price value of the contract, less the amount of any progress payments made under FAR Clause 52.232.5, Payments Under Fixed-Price Construction Contracts.

NOTE: For planning purposes, the contractor shall include a line item in the schedule of values and progress schedule for completion of punch-list items, site clean-up, demobilization and final construction (as-built) drawings. The amount of this line item shall be equal to 10% of the contract value or \$100,000, whichever is less. The Government will not pay final invoices for this amount until all punch-list, site clean-up, and demobilization activities are complete; final construction drawings are delivered; and final acceptance is made on DD Form 250, Material Inspection and Receiving Report.

NASA/KSC SOLICITATION NNK12435778R
SECTION F – DELIVERIES OR PERFORMANCE

F. 1 LISTING OF FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)
CLAUSES INCORPORATED BY REFERENCE

FAR 52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION
OF WORK (APR 1984)

Fill ins:

- (a) 10 calendar days after the date the Contractor receives the notice to proceed.
- (b) 730 calendar days

Contract Line Item	Time Stated for Completion
TASK 1 (BASE BID)	730 Calendar days after Notice to Proceed for the Base Bid
OPTION 1	In conjunction within the period of performance of the base bid.
OPTION 2	In conjunction within the period of performance of the base bid.
OPTION 3	In conjunction within the period of performance of the base bid.

FAR 52.242-14 SUSPENSION OF WORK (APR 1984)

F. 2 KSC 52.211-92 WORK PERIOD (MAR 2002)

Contractor's work day will be limited to first shift 7:00 A.M. to 3:30 P.M., on Monday through Friday only. Any other work period will require special/ written approval from the Contracting Officer seven (7) days in advance of proposed change in work periods.

F. 3 PLACE OF PERFORMANCE

This is a firm-fixed price construction contract for Design to Replace Chilled Water Controls, Industrial Area located at the Kennedy Space Center.

F. 4 DOWNTIME AND EXCAVATION HOLDS

For the purposes of this contract, the Contractor shall allow in his bid for a maximum of 15 days during which all construction activities will be prohibited. In addition the Contractor shall allow for a maximum of 0 days during which all excavation and other subsurface activities will be prohibited but other construction activities will be allowed. The Government will provide twenty-four hours notice each time these restrictions are invoked.

**NASA/KSC SOLICITATION NNK12435778R
SECTION G – CONTRACT ADMINISTRATION DATA**

**G. 1 NASA FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 18)
CLAUSES INCORPORATED BY REFERENCE**

NFS 1852.242-70	TECHNICAL DIRECTION (SEP 1993)
NFS 1852.245-71	INSTALLATION – ACCOUNTABLE GOVERNMENT PROPERTY (JAN 2011)
NFS 1852.245-73	FINANCIAL REPORTING OF NASA PROPERTY IN THE CUSTODY OF CONTRACTORS (JAN 2011)
NFS 1852.245-76	LIST OF GOVERNMENT PROPERTY FURNISHED PURSUANT TO FAR 52.245-1 (JAN 2011)

Fill-In (1): Attachment J-B, Article J-B-20

Fill-In (2): Various locations in the KSC Industrial Area

NASA/KSC SOLICITATION NNK12435778R
SECTION H – SPECIAL CONTRACT REQUIREMENTS

H. 1 NASA FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 18) CLAUSES INCORPORATED BY REFERENCE

NFS 1852.223-70 SAFETY AND HEALTH (APR 2002)

NFS 1852.223-75 MAJOR BREACH OF SAFETY OR SECURITY (FEB 2002)

NFS 1852.225-70 EXPORT LICENSES (FEB 2000)

Fill-in: NASA's Kennedy Space Center

NFS 1852.242-72 OBSERVANCE OF LEGAL HOLIDAYS (AUG 1992)

H.2 KSC 52.223-121 REPORTING OF INCIDENTS INVOLVING WORKPLACE VIOLENCE (JUL 2008)

The contractor shall conduct training on and develop procedures for recognizing, managing and responding to incidents and threats of workplace violence as defined in NASA Policy Directive (NPD) 1600.3. Contractors shall also promptly report all incidents involving workplace violence to the Protective Services Office. If the NASA Workplace Violence Prevention and Response (WVPR) Team Chair and Co Chair determine it is appropriate for the contractor to participate in a WVPR Team meeting, the contractor shall comply with the WVPR Team request. The contractor is also responsible for reporting disposition of the incident reported to the NASA WVPR Team.

This requirement shall flow down to the subcontractors, however the subcontractors shall report up through the prime contractor.

(End of clause)

H. 3 KSC 52.242-90 CONTROLS APPLICABLE TO CONTRACTORS' ACTIVITIES (JAN 2011)

The publications below, and subsequent revisions thereof, are incorporated herein by reference. These publications prescribe regulatory and procedural criteria which are applicable to this contract. The contractor shall promptly take corrective action upon notice of noncompliance from the Contracting Officer or his/her authorized representative(s) with any provision of the publications listed below. Any questions regarding this clause or applicability of compliance documents should be directed to the Contracting Officer.

The following compliance documents may be found at:

<http://tdglobal.ksc.nasa.gov/ReferencedDocuments/>

NASA Headquarters Policy Directives (NPDs).

NASA/KSC SOLICITATION NNK12435778R
SECTION H – SPECIAL CONTRACT REQUIREMENTS

45SWI40-201	45th Space Wing Instruction 40-201 Radiation Protection Program (In addition to KNPD 1860.1, applicable to contracts for services performed at CCAFS)
KNPR 8715.2	Comprehensive Emergency Management Plan
KNPD 1440.1	KSC Records Management Program
KNPR 1600.1	KSC Security Procedural Requirements
KNPD 1600.3	Use of Alcoholic Beverages on Kennedy Space Center (KSC) Property
KNPD 1800.2	KSC Hazard Communication Program - In addition, Contractor shall submit the material safety data sheets in hard copy to the MESC or successor contractor for NASA/KSC Materials Safety Data Sheet Archive.
KNPD 1810.1	KSC Occupational Medicine Program
KNPR 1820.3	KSC Hearing Loss Prevention Program
KNPR 1820.4	KSC Respiratory Protection Program
KNPR 1840.19	KSC Industrial Hygiene Programs
KNPR 1860.1	KSC Ionizing Radiation Protection Program
KNPR 1860.2	KSC Nonionizing Radiation Protection Program
KNPR 1870.1	KSC Sanitation Program
KNPR 2570.1	KSC Radio Frequency Spectrum Management Procedural Requirements During periods of special testing on Kennedy Space Center and at the Cape Canaveral Air Force Station, the Contractor may be required to cease radiating on any radio equipment that may be utilized at the time. Any construction equipment utilized by the Contractor which may be causing radio frequency interference will be required to shut down until the interference is mitigated.
KNPR 4000.1	Supply and Equipment System Manual
KNPR 6000.1	Transportation Support System
KNPR 8500.1	KSC Environmental Management
KNPR 8715.3	KSC Safety Practices Procedural Requirements
KNPR 8830.1	Facilities and Real Property Management Procedural Requirements

(End of clause)

**H.4 KSC 52.242-93 CONTRACTOR WORKFORCE REPORT – ONSITE
CONTRACTORS AND SUBCONTRACTORS (OCT 2006)**

The Contractor shall submit, on a quarterly basis, a manpower report delineating information about its workforce. The report shall include: the contract number, the contractor's total on-site workforce, total on-site union represented employees by bargaining unit; total on-site non-union represented employees, and total off-site workforce performing on the contract. The Contractor shall provide this information no later than 10 days after the close of each reporting period which end March 31st, June 30th, September 30th, and December 31st. The report shall be submitted to the Contracting Officer with copies to Workforce Planning and Analysis Office, (Code BA-D) and Industrial Labor Relations Office (Code OP).

NASA/KSC SOLICITATION NNK12435778R
SECTION H – SPECIAL CONTRACT REQUIREMENTS

(End of clause)

H.5 SAFETY AND HEALTH

Pursuant to NFS 1852.223-70, Safety and Health:

- (a) Safety is the freedom from those conditions that can cause death, injury, occupational illness, damage to or loss of equipment or property, or damage to the environment. NASA's safety priority is to protect: the public, astronauts and pilots, the NASA workforce (including contractor employees working on NASA contracts), and high-value equipment and property.
- (b) The Contractor shall take all reasonable safety and occupational health measures in performing this contract. The Contractor shall comply with all Federal, State, and local laws applicable to safety and occupational health and with the safety and occupational health standards, specifications, reporting requirements, and any other relevant requirements of this contract.

- (c) Kennedy Space Center Voluntary Protection Program (VPP)

Kennedy Space Center has implemented a comprehensive safety and health management system, and has demonstrated its commitment to providing and maintaining a safe workplace by successfully completing a rigorous evaluation process to achieve recognition by the Occupational Health and Safety Administration (OSHA) as a "Voluntary Protection Program (VPP) Star Worksite." The VPP program promotes effective worksite-based safety and health, encourages employers and employees to reduce the number of occupational safety and health hazards at their places of employment, establishes cooperative relationships between management, labor, and OSHA, and serves to augment limited OSHA resources.

- (d) Reporting Procedures for Close Calls and Mishaps

(Also reference NFS 1852.223-70, Safety and Health)

The contractor shall submit a NASA Direct Construction Contractor Mishap Report Form (KDP-F-3645) to the Contracting Officer to document close calls or mishaps and associated corrective actions. In addition, the Contracting Officer will issue a "Notice of Violation" to document safety violations under this contract. The Contractor shall use the form provided to communicate actions taken to correct or mitigate safety/health non-conformance at the job-site, as well as any corrective actions taken to prevent recurrence. This report must be posted on the job site until all corrective actions have been completed.

In the event the non-compliance poses imminent danger, the Contracting Officer may invoke the stop-work order clause in this contract until such time as the immediate

NASA/KSC SOLICITATION NNK12435778R
SECTION H – SPECIAL CONTRACT REQUIREMENTS

hazard has been mitigated. If the Contractor fails or refuses to institute prompt corrective action, the Contracting Officer may invoke the stop-work order clause or any other remedy available to the Government in the event of such failure or refusal.

The Contractor (or subcontractor or supplier) shall insert the “Reporting Procedures for Close Calls and Mishaps” section of this clause, including this paragraph and any applicable Schedule provisions and clauses, with appropriate changes of designations of the parties, in all solicitations and subcontracts of every tier, when the work will be conducted completely or partly on premises owned or controlled by the Government.

NASA/KSC SOLICITATION NNK12435778R
SECTION I – CONTRACT CLAUSES

I.1 CLAUSES INCORPORATED BY REFERENCE (52.252-2) (FEB 1998)

This document incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at these addresses:

<http://www.ksc.nasa.gov/procurement/clause/>
<http://prod.nais.nasa.gov/cgi-bin/nais/index.cgi>
<http://ec.msfc.nasa.gov/hq/library/v-reg.htm>.

**I. 2 LISTING OF FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)
CLAUSES INCORPORATED BY REFERENCE**

<u>CLAUSE NO.</u>	<u>TITLE</u>
FAR 52.202-1	DEFINITIONS (JAN 2012)
FAR 52.203-3	GRATUITIES (APR 1984)
FAR 52.203-5	COVENANT AGAINST CONTINGENT FEES (APR 1984)
FAR 52.203-6	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT (SEP 2006)
FAR 52.203-7	ANTI-KICKBACK PROCEDURES (OCT 2010)
FAR 52.203-8	CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)
FAR 52.203-10	PRICE OR FEE ADJUSTMENTS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)
FAR 52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (SEP 2007)
FAR 52.204-4	PRINTED OR COPIED DOUBLE-SIDED ON POSTCONSUMER FIBER CONTENT PAPER (MAY 2011)
FAR 52.204-7	CENTRAL CONTRACTOR REGISTRATION (FEB 2012)
FAR 52.204-9	PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL (JAN 2011)
FAR 52.204-10	REPORTING EXECUTIVE COMPENSATION AND FIRST-TIER SUBCONTRACT AWARDS (JUL 2010)
FAR 52.209-6	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED SUSPENDED, OR PROPOSED FOR DEBARMENT (DEC 2010)

NASA/KSC SOLICITATION NNK12435778R
SECTION I – CONTRACT CLAUSES

- FAR 52.215-2 AUDIT AND RECORDS – NEGOTIATION (OCT 2010)**
- FAR 52.215-8 ORDER OF PRECEDENCE – UNIFORM CONTRACT FORMAT (OCT 1997)**
- FAR 52.215-10 PRICE REDUCTION FOR DEFECTIVE CERTIFIED COST OR PRICING DATA (OCT 2010)**
- FAR 52.215-12 SUBCONTRACTOR CERTIFIED COST OR PRICING DATA (OCT 2010)**
- FAR 52.215-21 REQUIREMENTS FOR CERTIFIED COST OR PRICING DATA AND DATA OTHER THAN CERTIFIED COST OR PRICING DATA – MODIFICATIONS (OCT 2010) (ALTERNATE III)(OCT 1997)**
- Fill-In: (c) Submit the cost portion of the proposal via the following electronic media:
submit via e-mail in MS Excel format
- FAR 52.219-4 NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS (JAN 2011)**
- FAR 52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS (JAN 2011)**
- FAR 52.219-9 SMALL BUSINESS SUBCONTRACTING PLAN (JAN 2011) – ALTERNATE II (OCT 2001)**
- FAR 52.219-28 POST-AWARD SMALL BUSINESS PROGRAM REREPRESENTATION (APR 2009)**
- FAR 52.222-1 NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (FEB 1997)**
- FAR 52.222-3 CONVICT LABOR (JUN 2003)**
- FAR 52.222-4 CONTRACT WORK HOURS AND SAFETY STANDARDS ACT—OVERTIME COMPENSATION (JUL 2005)**
- FAR 52.222-6 DAVIS-BACON ACT (JUL 2005)**
- FAR 52.222-7 WITHHOLDING OF FUNDS (FEB 1988)**
- FAR 52.222-8 PAYROLLS AND BASIC RECORDS (JUN 2010)**
- FAR 52.222-9 APPRENTICES AND TRAINEES (JUL 2005)**
- FAR 52.222-10 COMPLIANCE WITH COPELAND ACT REQUIREMENTS (FEB 1988)**
- FAR 52.222-11 SUBCONTRACTS (LABOR STANDARDS) (JUL 2005)**
- FAR 52.222-12 CONTRACT TERMINATION--DEBARMENT (FEB 1988)**

**NASA/KSC SOLICITATION NNK12435778R
SECTION I – CONTRACT CLAUSES**

FAR 52.222-13	COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REGULATIONS (FEB 1988)
FAR 52.222-14	DISPUTES CONCERNING LABOR STANDARDS (FEB 1988)
FAR 52.222-15	CERTIFICATION OF ELIGIBILITY (FEB 1988)
FAR 52.222-21	PROHIBITION OF SEGREGATED FACILITIES (FEB 1999)
FAR 52.222-26	EQUAL OPPORTUNITY (MAR 2007)
FAR 52.222-27	AFFIRMATIVE ACTION COMPLIANCE REQUIREMENTS FOR CONSTRUCTION (FEB 1999)
FAR 52.222-35	EQUAL OPPORTUNITY FOR VETERANS (SEP 2010)
FAR 52.222-36	AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES (OCT 2010)
FAR 52.222-37	EMPLOYMENT REPORTS ON VETERANS (SEP 2010)
FAR 52.222-40	NOTIFICATION OF EMPLOYEE RIGHTS UNDER THE NATIONAL LABOR RELATIONS ACT (DEC 2010)
FAR 52.222-50	COMBATING TRAFFICKING IN PERSONS (AUG 2007)
FAR 52.222-54	EMPLOYMENT ELIGIBILITY VERIFICATION (JAN 2009)
FAR 52.223-5	POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (MAY 2011)
FAR 52.223-6	DRUG-FREE WORKPLACE (MAY 2001)
FAR 52.223-15	ENERGY EFFICIENCY IN ENERGY-CONSUMING PRODUCTS (DEC 2007)
FAR 52.223-17	AFFIRMATIVE PROCUREMENT OF EPA-DESIGNATED ITEMS IN SERVICE AND CONSTRUCTION CONTRACTS (MAY 2008)
FAR 52.223-18	CONTRACTOR POLICY TO BAN TEXT MESSAGING WHILE DRIVING (SEP 2010)
FAR 52.225-13	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (JUN 2008)
FAR 52.227-1	AUTHORIZATION AND CONSENT (DEC 2007)
FAR 52.227-2	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (DEC 2007)
FAR 52.227-4	PATENT INDEMNITY - CONSTRUCTION CONTRACTS (DEC 2007)
FAR 52.228-2	ADDITIONAL BOND SECURITY (OCT 1997)
FAR 52.228-5	INSURANCE - WORK ON A GOVERNMENT INSTALLATION (JAN 1997)
FAR 52.228-11	PLEDGES OF ASSETS (JAN 2012)
FAR 52.228-12	PROSPECTIVE SUBCONTRACTOR REQUESTS FOR BONDS (OCT 1995)
FAR 52.228-14	IRREVOCABLE LETTER OF CREDIT (DEC 1999)

**NASA/KSC SOLICITATION NNK12435778R
SECTION I – CONTRACT CLAUSES**

- FAR 52.228-15 PERFORMANCE AND PAYMENT BONDS – CONSTRUCTION (OCT 2010)**
FAR 52.229-3 FEDERAL, STATE AND LOCAL TAXES (APR 2003)
FAR 52.232-5 PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS (SEP 2002)
FAR 52.232-17 INTEREST (OCT 2010)
FAR 52.232-23 ASSIGNMENT OF CLAIMS (JAN 1986)
FAR 52.232-27 PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS (OCT 2008)

Submit Invoices To:	
1 - Original	NASA Shared Services Center (NSSC) Financial Management Division (FMD) – Accounts Payable Bldg 1111, C. Road Stennis Space Center, MS 39529 FAX: 866-209-5415 Email: NSSC-AccountsPayable@nasa.gov
1 - Copy	NASA John F. Kennedy Space Center Procurement Office, Code OP-CS-B Kennedy Space Center, FL 32899

- FAR 52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER CENTRAL CONTRACTOR REGISTRATION (OCT 2003)**

Any questions related to payment via Electronic Funds Transfer (EFT) should be directed to:

Designated Paying Office
NASA Shared Services Center (NSSC)
Financial Management Division (FMD) - Accounts Payable
Bldg 1111, C. Road
Stennis Space Center, MS 39529
Email: NSSC-AccountsPayable@nasa.gov

Fax: 866-209-5415

- FAR 52.233-1 DISPUTES (JUL 2002)**
FAR 52.233-3 PROTEST AFTER AWARD (AUG 1996)
FAR 52.233-4 APPLICABLE LAW FOR BREACH OF CONTRACT CLAIMS (OCT 2004)
FAR 52.236-1 PERFORMANCE OF WORK BY THE CONTRACTOR (APR 1984)

[Fill-In: Fifteen Percent (15%)]

- FAR 52.236-2 DIFFERING SITE CONDITIONS (APR 1984)**
FAR 52.236-3 SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK

**NASA/KSC SOLICITATION NNK12435778R
SECTION I – CONTRACT CLAUSES**

(APR 1984)

FAR 52.236-5	MATERIAL AND WORKMANSHIP (APR 1984)
FAR 52.236-6	SUPERINTENDENCE BY THE CONTRACTOR (APR 1984)
FAR 52.236-7	PERMITS AND RESPONSIBILITIES (NOV 1991)
FAR 52.236-8	OTHER CONTRACTS (APR 1984)
FAR 52.236-9	PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS (APR 1984)
FAR 52.236-10	OPERATIONS AND STORAGE AREAS (APR 1984)
FAR 52.236-11	USE AND POSSESSION PRIOR TO COMPLETION (APR 1984)
FAR 52.236-12	CLEANING UP (APR 1984)
FAR 52.236-13	ACCIDENT PREVENTION (NOV 1991) (ALTERNATE 1) (NOV 1991)
FAR 52.236-15	SCHEDULES FOR CONSTRUCTION CONTRACTS (APR 1984)
FAR 52.236-17	LAYOUT OF WORK (APR 1984)
FAR 52.236-21	SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION (FEB 1997) ALTERNATE I (APR 1984)
FAR 52.236-26	PRECONSTRUCTION CONFERENCE (FEB 1995)
FAR 52.242-13	BANKRUPTCY (JUL 1995)
FAR 52.243-1	CHANGES – FIXED PRICE (AUG 1987) (ALTERNATE III)(APR 1984)
FAR 52.243-4	CHANGES (JUN 2007)
FAR 52.243-6	CHANGE ORDER ACCOUNTING (APR 1984)
FAR 52.244-6	SUBCONTRACTS FOR COMMERCIAL ITEMS (DEC 2010)
FAR 52.245-1	GOVERNMENT PROPERTY (AUG 2010) - ALTERNATE 1
FAR 52.245-9	USE AND CHARGES (AUG 2010)
FAR 52.246-21	WARRANTY OF CONSTRUCTION (MAR 1994)(ALTERNATE 1) (APR 1984)
FAR 52.248-3	VALUE ENGINEERING – CONSTRUCTION (OCT 2010)
FAR 52.249-2	TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE) (MAY 2004) - ALTERNATE I (SEP 1996)
FAR 52.249-10	DEFAULT (FIXED-PRICE CONSTRUCTION) (APR 1984)
FAR 52.253-1	COMPUTER GENERATED FORMS (JAN 1991)

NASA/KSC SOLICITATION NNK12435778R
SECTION I – CONTRACT CLAUSES

I. 3 NASA FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 18)
CLAUSES INCORPORATED BY REFERENCE

NFS 1852.209-72 COMPOSITION OF THE CONTRACTOR (DEC 1988)

NFS 1852.215-84 OMBUDSMAN (OCT 2003)

Fill in: Mr. Kelvin Manning
Kennedy Space Center, Code AA-B,
Kennedy Space Center FL 32899
Telephone number 321-867-7246
Email: Kelvin.M.Manning@[nasa.gov](mailto:Kelvin.M.Manning@nasa.gov)

NFS 1852.219-74 USE OF RURAL AREA SMALL BUSINESSES (SEP 1990)

NFS 1852.219-75 SMALL BUSINESS SUBCONTRACTING REPORTING (MAY 1999)

NFS 1852.219-76 NASA 8 PERCENT GOAL (JUL 1997)

NFS 1852.225-71 RESTRICTION ON FUNDING ACTIVITY WITH CHINA

NFS 1852.228-75 MINIMUM INSURANCE COVERAGE (OCT 1988)

NFS 1852.236-73 HURRICANE PLAN (DEC 1988)

NFS 1852.237-73 RELEASE OF SENSITIVE INFORMATION (JUN 2005)

NFS 1852.243-71 SHARED SAVINGS (MAR 1997)

NFS 1852-245-71 INSTALLATION-ACCOUNTABLE GOVERNMENT PROPERTY
(NOV 2004)

Fill-in: Para (c)(3) Attachment J-B, Article J-B-20

I.4 FAR 52.209-9 UPDATES OF PUBLICLY AVAILABLE INFORMATION
REGARDING RESPONSIBILITY MATTERS (JAN 2012)

(a) The Contractor shall update the information in the Federal Awardee Performance and Integrity Information System (FAPIS) on a semi-annual basis, throughout the life of the contract, by posting the required information in the Central Contractor Registration database at <http://www.ccr.gov> .

NASA/KSC SOLICITATION NNK12435778R
SECTION I – CONTRACT CLAUSES

(b) As required by section 3010 of the Supplemental Appropriations Act, 2010 (Pub. L. 111-212), all information posted in FAPIIS on or after April 15, 2011, except past performance reviews, will be publicly available. FAPIIS consist of two segments—

(1) The non-public segment, into which Government officials and the Contractor post information, which can only be viewed by—

(i) Government personnel and authorized users performing business on behalf of the Government; or

(ii) The Contractor, when viewing data on itself; and

(2) The publicly-available segment, to which all data in the non-public segment of FAPIIS is automatically transferred after a waiting period of 14 calendar days, except for--

(i) Past performance reviews required by subpart 42.15;

(ii) Information that was entered prior to April 15, 2011; or

(iii) Information that is withdrawn during the 14-calendar-day waiting period by the Government official who posted it in accordance with paragraph (c)(1) of this clause.

(c) The Contractor will receive notification when the Government posts new information to the Contractor's record.

(1) If the Contractor asserts in writing within 7 calendar days, to the Government official who posted the information, that some of the information posted to the non-public segment of FAPIIS is covered by a disclosure exemption under the Freedom of Information Act, the Government official who posted the information must within 7 calendar days remove the posting from FAPIIS and resolve the issue in accordance with agency Freedom of Information procedures, prior to reposting the releasable information. The contractor must cite 52.209-9 and request removal within 7 calendar days of the posting to FAPIIS.

(2) The Contractor will also have an opportunity to post comments regarding information that has been posted by the Government. The comments will be retained as long as the associated information is retained, i.e., for a total period of 6 years. Contractor comments will remain a part of the record unless the Contractor revises them.

(3) As required by section 3010 of Pub. L. 111-212, all information posted in FAPIIS on or after April 15, 2011, except past performance reviews, will be publicly available.

(d) Public requests for system information posted prior to April 15, 2011, will be handled under Freedom of Information Act procedures, including, where appropriate, procedures promulgated under E.O. 12600.

NASA/KSC SOLICITATION NNK12435778R
SECTION I – CONTRACT CLAUSES

(End of clause)

**I. 5 FAR 52.223-9 ESTIMATE OF PERCENTAGE OF RECOVERED MATERIAL
CONTENT FOR EPA-DESIGNATED PRODUCTS (MAY 2008)
(ALTERNATE I) (MAY 2008)**

(a) *Definitions.* As used in this clause—

“Postconsumer material” means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of “recovered material.”

“Recovered material” means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.

(b) The Contractor shall execute the following certification required by the Resource Conservation and Recovery Act of 1976 ([42 U.S.C. 6962\(i\)\(2\)\(C\)](#)):

CERTIFICATION

I, _____ (name of certifier), am an officer or employee responsible for the performance of this contract and hereby certify that the percentage of recovered material content for EPA-designated items met the applicable contract specifications or other contractual requirements.

[Signature of the Officer or Employee]

[Typed Name of the Officer or Employee]

[Title]

[Name of Company, Firm, or Organization]

[Date]

(END OF CERTIFICATION)

(c) The Contractor, on completion of this contract, shall—

NASA/KSC SOLICITATION NNK12435778R
SECTION I – CONTRACT CLAUSES

- (1) Estimate the percentage of the total recovered material content for EPA-designated item(s) delivered and/or used in contract performance, including, if applicable, the percentage of post-consumer material content; and
- (2) Submit this estimate to the Contracting Officer.

(End of clause)

**I. 6 FAR 52.225-9 BUY AMERICAN ACT–CONSTRUCTION MATERIALS
(SEP 2010)**

(a) *Definitions.* As used in this clause--

“Commercially available off-the-shelf (COTS) item”—

(1) Means any item of supply (including construction material) that is—

- (i) A commercial item (as defined in paragraph (1) of the definition at FAR 2.101);
- (ii) Sold in substantial quantities in the commercial marketplace; and
- (iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in section 3 of the Shipping Act of 1984 (46 U.S.C. App. 1702), such as agricultural products and petroleum products.

“Component” means an article, material, or supply incorporated directly into a construction material.

“Construction material” means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

“Cost of components” means--

- (1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs

NASA/KSC SOLICITATION NNK12435778R
SECTION I – CONTRACT CLAUSES

are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

- (2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

“Domestic construction material” means—

- (1) An unmanufactured construction material mined or produced in the United States;
- (2) A construction material manufactured in the United States, if—
 - (i) The cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic; or
 - (ii) The construction material is a COTS item.

“Foreign construction material” means a construction material other than a domestic construction material.

“United States” means the 50 States, the District of Columbia, and outlying areas.

(b) *Domestic preference.*

- (1) This clause implements the Buy American Act (41 U.S.C. 10a-10d) by providing a preference for domestic construction material. In accordance with 41 U.S.C. 431, the component test of the Buy American Act is waived for construction material that is a COTS item. (See FAR 12.505(a)(2)). The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.
- (2) This requirement does not apply to information technology that is a commercial item or to the construction materials or components listed by the Government as follows:
- (3) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(2) of this clause if the Government determines that
 - (i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the requirements of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;

NASA/KSC SOLICITATION NNK12435778R
SECTION I – CONTRACT CLAUSES

- (ii) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or
- (iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) *Request for determination of inapplicability of the Buy American Act.*

- (i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including--
 - (A) A description of the foreign and domestic construction materials;
 - (B) Unit of measure;
 - (C) Quantity;
 - (D) Price;
 - (E) Time of delivery or availability;
 - (F) Location of the construction project;
 - (G) Name and address of the proposed supplier; and
 - (H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.
- (ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.
- (iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).
- (iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

NASA/KSC SOLICITATION NNK12435778R
SECTION I – CONTRACT CLAUSES

- (2) If the Government determines after contract award that an exception to the Buy American Act applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(3)(i) of this clause.
- (3) Unless the Government determines that an exception to the Buy American Act applies, use of foreign construction material is noncompliant with the Buy American Act.
- (d) *Data*. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison

Construction material description	Unit of measure	Quantity	Price (dollars) *
<i>Item 1</i>			
Foreign construction material			
Domestic construction material			
<i>Item 2</i>			
Foreign construction material			
Domestic construction material			

[List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.]

[Include other applicable supporting information.]

*[*Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).]*

(End of clause)

I. 7 FAR 52.236-4 PHYSICAL DATA (APR 1984)

Data and information furnished or referred to below is for the Contractor's information. The Government shall not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.

NASA/KSC SOLICITATION NNK12435778R
SECTION I – CONTRACT CLAUSES

- (a) The indications of physical conditions on the drawings and in the specifications are the result of site investigations by benchmarks for vertical control, elevations, and dimensions from existing features. The Contractor shall be responsible for any surveys, augers, borings, core borings, test pits, probings, or other investigations necessary or incidental to performance of the work.
- (b) Weather conditions: The climate of the Cape Canaveral-Kennedy Space Center, Florida area is subtropical with short, mild winters and hot, humid summers. Summer extends from the middle of May to the middle of October with the highest mean temperatures in July and August and the extreme highest temperatures in June. Area thunderstorms occurring during the summer months can be violent with cloud to ground lightning, heavy rain and strong gusty winds. The hurricane season begins in June and ends in December with the highest frequency in August, September, and October. Winter temperatures range from the probability of an 80 degree high during each month to at least one occasion (per winter) of below freezing conditions. Mean average maximum-minimum temperatures and mean average rainfall is 78.6 degrees – 64.0 degrees and 48.53 inches for Cape Canaveral and 79.4 degrees – 65.4 degrees and 53.21 inches for Kennedy Space Center. Detailed climatological data may be obtained from the Patrick Air Force Base Weather Services, 321-853-8485, Patrick Air Force Base, Florida.
- (c) Transportation facilities:
- (1) ROAD: The Cape Canaveral-Kennedy Space Center area is accessible via Florida State Highways 3, 401, 405, 520, and 528 and U.S. Highways 1 and A1A. Perimeter gates to Kennedy Space Center and Cape Canaveral Air Force Station are located at Highway 401 (Gate 1), South Highway 3 (Gate 2), Highway 405 (Gate 3), and North Highway 3 (Gate 4). All gates are normally operational during first shift hours. Off shift hours may vary, and additional schedule or access limitations will be in place during critical launch processing operations.
- (2) RAIL: Government trackage connects with the Florida East Coast Railway Company (FEC) at Jay-Jay, Florida, approximately 3 miles north of Titusville, Florida. Shipping destination should be shown as “Titusville, Florida for Kennedy Space Center, Florida.” NASA locomotives move cars between Jay-Jay and various locations on Kennedy Space Center. Side and end ramps are available in the KSC Industrial Area.

NASA/KSC SOLICITATION NNK12435778R
SECTION I – CONTRACT CLAUSES

- (3) WATER (OCEAN): United States Air Force and Navy and commercial dock facilities are available at Port Canaveral, Florida.
- (4) WATER (OTHER): The Kennedy Space Center Vehicle Assembly Building (VAB) Marine Terminal and Cape Canaveral Air Force Station barge facilities are accessible via the inland waterway through the Banana River.
- (5) AIR (COMMERCIAL): Facilities serving the area are located at Melbourne (approximately 42 miles) and Orlando (approximately 55 miles) Florida. Pickup and delivery of air shipments is available.

Detailed information on availability and limitation of facilities, shipping and billing may be obtained from the Supply, Equipment, Transportation and Center Support Branch, Code TA-E1, John F. Kennedy Space Center, NASA, Kennedy Space Center, Florida 32899.

(d) Other: NONE

(End of clause)

I. 8 NFS 1852.243-70 ENGINEERING CHANGE PROPOSALS (OCT 2001)

(a) Definitions.

“ECP” means an Engineering Change Proposal (ECP) which is a proposed engineering change and the documentation by which the change is described, justified, and submitted to the procuring activity for approval or disapproval.

- (b) Either party to the contract may originate ECPs. Implementation of an approved ECP may occur by either a supplemental agreement or, if appropriate, as a written change order to the contract.
- (c) Any ECP submitted to the Contracting Officer shall include a "not-to-exceed" price increase or decrease adjustment amount, if any, and the required period of performance adjustment, if any, acceptable to the originator of the ECP. If the change is originated within the Government, the Contracting Officer shall obtain a written agreement with the contractor regarding the "not-to-exceed" price and period of performance adjustments, if any, prior to issuing an order for implementation of the change.

NASA/KSC SOLICITATION NNK12435778R
SECTION I – CONTRACT CLAUSES

- (d) After submission of a contractor initiated ECP, the contracting officer may require the contractor to submit the following information:
- (1) Cost or pricing data in accordance with [FAR 15.403-5](#) if the proposed change meets the criteria for its submission under [FAR 15.403-4](#); or
 - (2) Information other than cost or pricing data adequate for contracting officer determination of price reasonableness or cost realism. The contracting officer reserves the right to request additional information if that provided by the contractor is considered inadequate for that purpose. If the contractor claims applicability of one of the exceptions to submission of cost or pricing data, it shall cite the exception and provide rationale for its applicability.
- (e) If the ECP is initiated by NASA, the contracting officer shall specify the cost information requirements, if any.

(End of clause)

I. 9 KSC 52.204-96 SECURITY CONTROLS FOR KSC AND CCAFS (APR 2010)

A. Identification of Employees

1. Badging

- i. Kennedy Space Center (KSC) badging is mandatory for all Contractor personnel who require access to KSC and National Aeronautics and Space Administration (NASA) facilities located on Cape Canaveral Air Force Station (CCAFS). Badging Requirements are in accordance with KNPR 1600.1, KSC Security Procedural Requirements, located at this public website: <http://tdgglobal.ksc.nasa.gov/ReferencedDocuments/>. Badges must be obtained before personnel may access the work site and the contractor is responsible for submitting complete, accurate, and timely security investigation and badge request information. The government is not liable for any project delays resulting from the contractor's failure to provide required information or the contractor's inability to achieve favorable investigative results.
- ii. Prior to performance, the contractor shall submit the following information to the Contracting Officer, who will certify and pass the information to the KSC Badging Office.
 - a. Contract number and location of work site(s);
 - b. Contract commencement and completion dates;
 - c. Status as prime or subcontractor; and,
 - d. Name of the contractor designated security/badging official.

NASA/KSC SOLICITATION NNK12435778R
SECTION I – CONTRACT CLAUSES

- e. A KSC Form 28-1222V2, (KSC Visitor Badge Request) and/or KSC Form 28-889 (KSC Visitor Badge/Multiple) for all employees requiring access to KSC or CCAFS.

Note: This is the minimum paperwork required for issuance of identification badges.

- iii. Security forms for employee investigations under this clause (Paragraph 2) shall be submitted by the contractor as soon as possible but in no case more than thirty days from initial badging.
- iv. During performance of this contract, issued badges shall be worn by contractor employees and prominently displayed above the waist at all times while on KSC or CCAFS property, unless an exception is granted for safety considerations. Upon termination of an employee, or completion/termination of the contract, the contractor shall immediately return such employee's identification and area permit badge(s) to the KSC Badging Office. NASA identification badges are the property of NASA and the Government reserves the right to invalidate/confiscate such badges at any time.
- v. Contractor security/badging officials shall ensure that badges are authorized for official purposes only and in accordance with the requirements of this clause and referenced directives. Abuse or misuse of badging authority may result in a loss of this authority. Employees that fail to comply with NASA regulations may be denied access to KSC.

2. Investigations

- i. All persons requiring ongoing access to Federal facilities, to include KSC and CCAFS, are required to complete security forms and submit to a Government investigation. Exceptions may be made for short term visitors (15 days or less). Persons needing access for a period greater than 180 days will require an investigation as described in paragraph 2ii below. Contractors should note that the 180 day period is for an individual's aggregate access across all contracts. If you believe your employee will require ongoing access (current contract and follow on projects) to KSC and/or require unescorted access to facilities under the KSC Area Permit System, you should submit the employee for the investigation described in paragraph A2ii below at the time of initial badging.
- ii. All persons requiring ongoing access to NASA installations are required to have a favorably completed National Agency Check with Written Inquiries (NACI). The following forms must be submitted to the Contracting Officer's Technical Representative (COTR), or the COTR's designee:
 - a. FD Form 258, Fingerprint Card (Electronic submission at KSC Badging Office)
 - b. Standard Form 85, Questionnaire for Non-Sensitive Positions;
 - c. Optional Form 306, Declaration for Federal Position Employment; and,

NASA/KSC SOLICITATION NNK12435778R
SECTION I – CONTRACT CLAUSES

- d. Three (3) copies of KSC Form 20-87, Request for Investigation (Signed by COTR or COTR's designee)

B. Badging Restrictions/Categories

Access to Areas Requiring a KSC Area Permit. Access to certain areas on KSC and CCAFS requires the contractor to have a KSC Area Permit and contractors may be granted “escorted” or “unescorted” access to these areas in accordance with KNPR 1600.1. Unescorted access requires a favorable determination in accordance with the investigative requirements detailed in paragraph A2ii above as well as the completion of mandated safety training.

- i. The NASA Protective Services Office, or its designee, PSSO, will determine whether the person is eligible for unescorted access within 14 business days after the receipt of the properly completed forms.
- ii. One or more on-site training classes will be required for admittance to the controlled access areas. The total training will not exceed four hours. Contractors may schedule any required training for their employees by contacting the COTR or designee. The contractor shall maintain a record of employees receiving the training.

I. 10 KSC ON-SITE FACILITIES AND SERVICES (APR 2005)

(a) UTILITIES

- ☒ There are no utility services available in the work area. All utilities required for performance of the contract work shall be provided by the Contractor.

(b) FACILITIES

- ☒ Restroom facilities are available within or near the work area. If use of these facilities by the Contractor's employees results in excessive construction grime and debris, the Contractor will, at the direction of the Contracting Officer, clean the facilities at no cost to the Government.

I. 11 LISTING OF KENNEDY SPACE CENTER REQUIREMENTS SUPPORTING CONTRACT SECTION I

The Kennedy Space Center requirements supporting Contract Section I are listed in Section J, Attachment J-B, KSC Project Specific Requirements.

I. 12 PERSONAL IDENTITY VERIFICATION CARD ISSUANCE PROCEDURES

The following procedures implement the Federal Information Processing Standards

NASA/KSC SOLICITATION NNK12435778R
SECTION I – CONTRACT CLAUSES

Publication (FIPS PUB) Number 201, Personal Identity Verification (PIV) of Federal Employees and Contractors (Reference FAR Clause 52.204-9, Personal Identity Verification of Contractor Personnel).

FIPS 201 Appendix A graphically displays the following procedure for the issuance of a PIV credential.

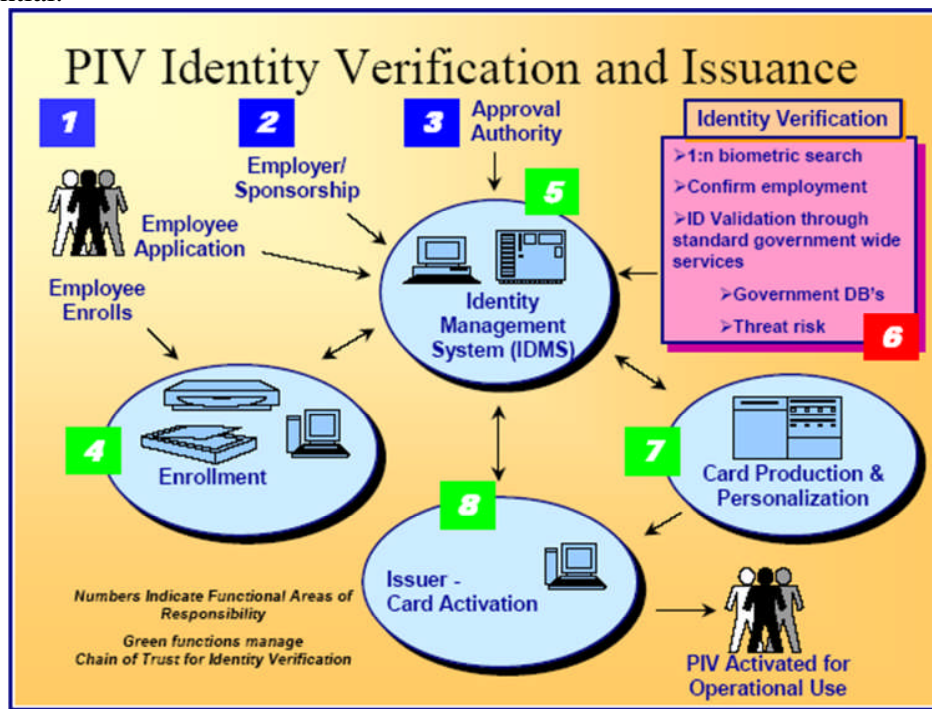


Figure A-1, FIPS 201, Appendix A

The following steps describe the procedures for the NASA Personal Identity Verification Card Issuance (PCI) of a PIV credential:

Step 1:

The Contractor's Corporate Security Officer (CSO), Program Manager (PM), or Facility Security Officer (FSO) submits a formal letter that provides a list of contract employees (applicant) names requesting access to the NASA Contracting Officer's Technical Representative (COTR). In the case of a foreign national applicant, approval through the NASA Foreign National Management System (NFMMS) must be obtained for the visit or assignment before any processing for a PIV credential can take place. Further, if the foreign national is not under a contract where a COTR has been officially designated, the foreign national will provide the information directly to their visit/assignment host, and the host sponsor will fulfill the duties of the COTR mentioned herein. In each case, the letter shall provide notification of the contract or foreign national employee's (hereafter the "applicant") full name (first, middle and last), social security number (SSN) or NASA Foreign National Management System Visitor Number if the foreign national does not have a SSN, and date of birth. If the contract employee has a current satisfactorily completed National Agency Check

NASA/KSC SOLICITATION NNK12435778R
SECTION I – CONTRACT CLAUSES

with Inquiries (NACI) or an equivalent or higher degree of background investigation, the letter shall indicate the type of investigation, the agency completing the investigation, and date the investigation was completed. Also, the letter must specify the risk/sensitivity level associated with the position in which each applicant will be working (NPR 1600.1, §4.5 is germane) Further, the letter shall also acknowledge that contract employees may be denied access to NASA information or information systems based on an unsatisfactory background investigation/adjudication.

After reviewing the letter for completeness and concurring with the risk/sensitivity levels, the COTR/host must forward the letter to the Center Chief of Security (CCS). The CCS shall review the OPM databases (e.g., DCII, PIP, et al.), and take appropriate steps to validate the applicant's investigation status. Requirements for a NACI or other investigation shall be initiated only if necessary.

Applicants who do not currently possess the required level of background investigation shall be directed to the e-QIP web site to complete the necessary background investigation forms online. The CCS shall provide to the COTR/host information and instructions on how to access the e-QIP for each contract or foreign national employee requiring access

Step 2:

Upon acceptance of the letter/background information, the applicant will be advised that in order to complete the investigative process, he or she must appear in-person before the authorized PIV registrar and submit two forms of identity source documents in original form. The identity source documents must come from the list of acceptable documents included in Form I-9, Employment Eligibility Verification, one which must be a Federalⁱ or State issued picture identification. Fingerprints will be taken at this time. The applicant must appear **no later than** the entry on duty date.

When the applicant appears, the registrar will electronically scan the submitted documents; any document that appears invalid will be rejected by the registrar. The registrar will capture electronically both a facial image and fingerprints of the applicant. The information submitted by the applicant will be used to create or update the applicant identity record in the Identity Management System (IDMS).

Step 3:

Upon the applicant's completion of the investigative document, the CCS reviews the information, and resolves discrepancies with the applicant as necessary. When the applicant has appeared in person and completed fingerprints, the package is electronically submitted to

ⁱ A non-PIV government identification badge, including the NASA Photo Identification Badge, MAY NOT BE USED for the original issuance of a PIV vetted credential

NASA/KSC SOLICITATION NNK12435778R
SECTION I – CONTRACT CLAUSES

initiate the NACI. The CCS includes a request for feedback on the NAC portion of the NACI at the time the request is submitted.

Step 4:

Prior to authorizing physical access of a contractor employee to a federally-controlled facility or access to a Federal information system, the CCS will a National Crime Information Center (NCIC) with an Interstate Identification Index check is/has been performed. In the case of a foreign national, a national check of the Bureau of Immigration and Customs Enforcement (BICE) database will be performed for each applicant. If this process yields negative information, the CCS will immediately notify the COTR/host of the determination regarding access made by the CCS.

Step 5:

Upon receipt of the completed NAC, the CCS will update IDMS from the NAC portion of the NACI and indicate the result of the suitability determination. If an unsatisfactory suitability determination is rendered, the COTR will advise the contractor that the employee is being denied physical access to all federally-controlled facilities and Federal information systems.

Based on a favorable NAC and NCIC/III or BICE check, the CCS will authorize the issuance of a PIV federal credential in the Physical Access Control System (PACS) database. The CCS, based on information provided by the COTR/host, will determine what physical access the applicant should be granted once the PIV issues the credential.

Step 6:

Using the information provided by the applicant during his or her in-person appearance, the PIV card production facility creates and instantiates the approved PIV card for the applicant with an activation date commensurate with the applicant's start date.

Step 7:

The applicant proceeds to the credential issuance facility to begin processing for receipt of his/her federal credential. The applicant provides to the credential issuing operator proof of identity with documentation that meets the requirements of FIPS 201 (DHS Employment Eligibility Verification (Form I-9) documents. These documents **must** be the same documents submitted for registration. The credential issuing operator will verify that the facial image, and optionally reference finger print, matches the enrollment data used to produce the card. Upon verification of identity, the operator will locate the employee's record in the PACS database, and modify the record to indicate the PIV card has been issued. The applicant will select a PIN for use with his or her new PIV card. Although root data is inaccessible to the operator, certain fields (hair color, eye color, et al.) may be modified to more accurately record the

NASA/KSC SOLICITATION NNK12435778R
SECTION I – CONTRACT CLAUSES

employee's information. The applicant proceeds to a kiosk or other workstation to complete activation of the PIV card using the initial PIN entered at card issuance.

**ALTERNATIVE FOR APPLICANTS WHO DO NOT HAVE A COMPLETED AND
ADJUDICATED NAC AT THE TIME OF ENTRANCE ON DUTY**

Steps 1 through 4 shall be accomplished for all applicants in accordance with the process described above. If the applicant is unable to appear in person until the time of entry on duty, or does not, for any other reason, have a completed and adjudicated NAC portion of the NACI at the time of entrance on duty, the following interim procedures shall apply.

1. If the documents required to submit the NACI have not been completed prior to EOD, the applicant will be instructed to complete all remaining requirements for submission of the investigation request. This includes presentation of I-9 documents and completion of fingerprints, if not already accomplished. If the applicant fails to complete these activities as prescribed in NPR 1600.1 (Chapters 3 & 4), it may be considered as failure to meet the conditions required for physical access to a federally-controlled facility or access to a Federal information system, and result in denial of such access.
2. Based on favorable results of the NCIC, the applicant shall be issued a temporary NASA identification card for a period not-to-exceed six months. If at the end of the six month period the NAC results have not been returned, the agency will at that time make a determination if an additional extension will be granted for the temporary identification card.
3. Upon return of the completed NAC, the process will continue from Step 5.

I.13 OPTION FOR INCREASED CONSTRUCTION PERFORMANCE

The Government may require the delivery of the numbered line item, identified in the Schedule as an option item at the price stated in the Schedule. The Contracting Officer may exercise the option by written notice to the Contractor within 90.

NASA/KSC SOLICITATION NNK12435778R
SECTION J – LIST OF ATTACHMENTS

J. 1 LIST OF ATTACHMENTS

A. The following documents are attached hereto and made a part of this contract:

Attachment	Title	Date	# Pages
A	Project Deliverables	6/2012	13
B	KSC Project Specific Requirements	6/2012	23
C	Department of Labor Wage Determination Number FL120001	1/6/2012	7
D	Technical Specifications, Reference Article C.2	9/9/2012	204
E	Drawings, Reference Article C.2	9/9/2012	94
	RESERVED		
	RESERVED		
H	Safety and Occupational Health Plan	TBD	TBD
I	Site Specific Safety Plan	TBD	TBD
J	KSC Form 50 – 101V2 NS, Kennedy Space Center Lift Plan for Construction Contractors	3/2011	4
K	Specification Section 26 29 23, Variable Frequency Drive Systems Under 600 Volts (Applicable to CLIN 0003 – Option 2)	4/6	17
L	KSCTA11569, Requirements Document, Replace Chilled Water Controls Industrial Area, Reference Article C.2	9/16/2011	18

B. The following listed documents are herein incorporated as part of this contract. They will not be physically included in the contract; however they will retain the same force and effect as if incorporated in full:

- (1) Representations, Certifications and Other Statements of Offerors
- (2) Instructions, Conditions, and Notices to Offerors

NASA/KSC SOLICITATION NNK12435778R
SECTION K – REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF
OFFERORS OR RESPONDENTS

K.1 FAR 52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS
(FEB 2012)

- (a) (1) The North American Industry classification System (NAICS) code for this acquisition is 238210
- (2) The small business size standard is \$14,000,000.00
- (3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.
- (b) (1) If the clause at 52.204-7, Central Contractor Registration, is included in this solicitation, paragraph (d) of this provision applies.
- (2) If the clause at 52.204-7 is not included in this solicitation, and the offeror is currently registered in CCR, and has completed the ORCA electronically, the offeror may choose to use paragraph (d) of this provision instead of completing the corresponding individual representations and certification in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:
- ☐ (i) Paragraph (d) applies.
- ☐ (ii) Paragraph (d) does not apply and the offeror has completed the individual representations and certifications in the solicitation.
- (c) (1) The following representations or certifications in ORCA are applicable to this solicitation as indicated:
- (i) 52.203-2, Certificate of Independent Price Determination. This provision applies to solicitations when a firm-fixed-price contract or fixed-price contract with economic price adjustment is contemplated, unless—
- (A) The acquisition is to be made under the simplified acquisition procedures in Part 13;
- (B) The solicitation is a request for technical proposals under two-step sealed bidding procedures; or
- (C) The solicitation is for utility services for which rates are set by law or regulation.

NASA/KSC SOLICITATION NNK12435778R
SECTION K – REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF
OFFERORS OR RESPONDENTS

- (ii) 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions. This provision applies to solicitations expected to exceed \$150,000.
- (iii) 52.204-3, Taxpayer Identification. This provision applies to solicitations that do not include the clause at 52.204-7, Central Contractor Registration.
- (iv) 52.204-5, Women-Owned Business (Other Than Small Business). This provision applies to solicitations that—
 - (A) Are not set aside for small business concerns;
 - (B) Exceed the simplified acquisition threshold; and
 - (C) Are for contracts that will be performed in the United States or its outlying areas.
- (v) 52.209-2, Prohibition on Contracting with Inverted Domestic Corporations – representation. This provision applies to solicitations using funds appropriated in fiscal years 2008, 2009, or 2010.
- (vi) 52.209-5, Certification Regarding Responsibility Matters. This provision applies to solicitations where the contract value is expected to exceed the simplified acquisition threshold.
- (vii) 52.214-14, Place of Performance--Sealed Bidding. This provision applies to invitations for bids except those in which the place of performance is specified by the Government.
- (viii) 52.215-6, Place of Performance. This provision applies to solicitations unless the place of performance is specified by the Government.
- (ix) 52.219-1, Small Business Program Representations (Basic & Alternate I). This provision applies to solicitations when the contract will be performed in the United States or its outlying areas.
 - (A) The basic provision applies when the solicitations are issued by other than DoD, NASA, and the Coast Guard.
 - (B) The provision with its Alternate I applies to solicitations issued by DoD, NASA, or the Coast Guard.

NASA/KSC SOLICITATION NNK12435778R
SECTION K – REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF
OFFERORS OR RESPONDENTS

- (x) 52.219-2, Equal Low Bids. This provision applies to solicitations when contracting by sealed bidding and the contract will be performed in the United States or its outlying areas.
- (xi) 52.222-22, Previous Contracts and Compliance Reports. This provision applies to solicitations that include the clause at 52.222-26, Equal Opportunity.
- (xii) 52.222-25, Affirmative Action Compliance. This provision applies to solicitations, other than those for construction, when the solicitation includes the clause at 52.222-26, Equal Opportunity.
- (xiii) 52.222-38, Compliance with Veterans' Employment Reporting Requirements. This provision applies to solicitations when it is anticipated the contract award will exceed the simplified acquisition threshold and the contract is not for acquisition of commercial items.
- (xiv) 52.223-1, Biobased Product Certification. This provision applies to solicitations that require the delivery or specify the use of USDA-designated items; or include the clause at 52.223-2, Affirmative Procurement of Biobased Products Under Service and Construction Contracts.
- (xv) 52.223-4, Recovered Material Certification. This provision applies to solicitations that are for, or specify the use of, EPA- designated items.
- (xvi) 52.225-2, Buy American Act Certificate. This provision applies to solicitations containing the clause at 52.225-1.
 - (A) If the acquisition value is less than \$25,000, the basic provision applies.
 - (B) If the acquisition value is \$25,000 or more but is less than \$50,000, the provision with its Alternate I applies.
 - (C) If the acquisition value is \$50,000 or more but is less than \$67,826, the provision with its Alternate II applies.
- (xvii) 52.225-4, Buy American Act--Free Trade Agreements--Israeli Trade Act Certificate. (Basic, Alternate I, and Alternate II) This provision applies to solicitations containing the clause at 52.225- 3.
- (xviii) 52.225-6, Trade Agreements Certificate. This provision applies to solicitations containing the clause at 52.225-5.
- (xix) 52.225-20, Prohibition on Conducting Restricted Business Operations in Sudan-- Certification. This provision applies to all solicitations.

NASA/KSC SOLICITATION NNK12435778R
SECTION K – REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF
OFFERORS OR RESPONDENTS

(xx) 52.225-25, Prohibition on Contracting with Entities Engaging in Sanctioned Activities Relating to Iran—Representation and Certification. This provision applies to all solicitations.

(xxi) 52.226-2, Historically Black College or University and Minority Institution Representation. This provision applies to—

(A) Solicitations for research, studies, supplies, or services of the type normally acquired from higher educational institutions; and

(B) For DoD, NASA, and Coast Guard acquisitions, solicitations that contain the clause at 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns.

(2) The following certifications are applicable as indicated by the Contracting Officer:

___ (i) 52.219-22, Small Disadvantaged Business Status.

___ (A) Basic.

___ (B) Alternate I.

___ (ii) 52.222-18, Certification Regarding Knowledge of Child Labor for Listed End Products.

___ (iii) 52.222-48, Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment Certification.

___ (iv) 52.222-52 Exemption from Application of the Service Contract Act to Contracts for Certain Services--Certification.

X (v) 52.223-9, with its Alternate I, Estimate of Percentage of Recovered Material Content for EPA-Designated Products (Alternate I only).

___ (vi) 52.227-6, Royalty Information.

___ (A) Basic.

___ (B) Alternate I.

___ (vii) 52.227-15, Representation of Limited Rights Data and Restricted Computer Software.

NASA/KSC SOLICITATION NNK12435778R
SECTION K – REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF OFFERORS OR RESPONDENTS

(d) The offeror has completed the annual representations and certifications electronically via the Online Representations and Certifications Application (ORCA) website at <https://www.acquisition.gov>. After reviewing the ORCA database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in paragraph (c) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [*offeror to insert changes, identifying change by clause number, title, date*]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR Clause	Title	Date	Change

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on ORCA.

(End of Provision)

**K.2 FAR 52.209-7 INFORMATION REGARDING RESPONSIBILITY MATTERS
(FEB 2012)**

(a) *Definitions.* As used in this provision—

“Administrative proceeding” means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (*e.g.*, Securities and Exchange Commission Administrative Proceedings, Civilian Board of Contract Appeals Proceedings, and Armed Services Board of Contract Appeals Proceedings). This includes administrative proceedings at the Federal and State level but only in connection with performance of a Federal contract or grant. It does not include agency actions such as contract audits, site visits, corrective plans, or inspection of deliverables.

“Federal contracts and grants with total value greater than \$10,000,000” means—

- (1) The total value of all current, active contracts and grants, including all priced options; and
- (2) The total value of all current, active orders including all priced options under indefinite-delivery, indefinite-quantity, 8(a), or requirements contracts (including task and delivery and multiple-award Schedules).

NASA/KSC SOLICITATION NNK12435778R
SECTION K – REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF
OFFERORS OR RESPONDENTS

“Principal” means an officer, director, owner, partner, or a person having primary management or supervisory responsibilities within a business entity (*e.g.*, general manager; plant manager; head of a division or business segment; and similar positions).

(b) The offeror [] has [] does not have current active Federal contracts and grants with total value greater than \$10,000,000.

(c) If the offeror checked “has” in paragraph (b) of this provision, the offeror represents, by submission of this offer, that the information it has entered in the Federal Awardee Performance and Integrity Information System (FAPIIS) is current, accurate, and complete as of the date of submission of this offer with regard to the following information:

(1) Whether the offeror, and/or any of its principals, has or has not, within the last five years, in connection with the award to or performance by the offeror of a Federal contract or grant, been the subject of a proceeding, at the Federal or State level that resulted in any of the following dispositions:

(i) In a criminal proceeding, a conviction.

(ii) In a civil proceeding, a finding of fault and liability that results in the payment of a monetary fine, penalty, reimbursement, restitution, or damages of \$5,000 or more.

(iii) In an administrative proceeding, a finding of fault and liability that results in—

(A) The payment of a monetary fine or penalty of \$5,000 or more; or

(B) The payment of a reimbursement, restitution, or damages in excess of \$100,000.

(iv) In a criminal, civil, or administrative proceeding, a disposition of the matter by consent or compromise with an acknowledgment of fault by the Contractor if the proceeding could have led to any of the outcomes specified in paragraphs (c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this provision.

(2) If the offeror has been involved in the last five years in any of the occurrences listed in (c)(1) of this provision, whether the offeror has provided the requested information with regard to each occurrence.

NASA/KSC SOLICITATION NNK12435778R
SECTION K – REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF
OFFERORS OR RESPONDENTS

- (d) The offeror shall post the information in paragraphs (c)(1)(i) through (c)(1)(iv) of this provision in FAPIIS as required through maintaining an active registration in the Central Contractor Registration database at <https://www.acquisition.gov> (see 52.204-7).

(End of provision)

K.3 1852.225-72 Restriction on funding Activity with China – Representation.

(a) Definition - “China” or “Chinese-owned” means the People’s Republic of China, any company owned by the People’s Republic of China or any company incorporated under the laws of the People’s Republic of China.

(b) Public Laws 112-10, Section 1340(a) and 112-55, Section 536, restrict NASA from contracting to participate, collaborate, or coordinate bilaterally in any way with China or a Chinese-owned company with funds appropriated on or after April 25, 2011. Contracts for commercial and non-developmental items are excepted from the prohibition as they constitute purchase of goods or services that would not involve participation, collaboration, or coordination between the parties.

(c) Representation. By submission of its offer, the offeror represents that the offeror is not China or a Chinese-owned company.

(End of provision)

NASA/KSC SOLICITATION NNK12435778R
SECTION L – INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS OR
RESPONDENTS

L. 1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE
(FAR 52.252-1) (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at these addresses:

<http://www.ksc.nasa.gov/procurement/clause/>
<http://prod.nais.nasa.gov/cgi-bin/nais/index.cgi>
<http://ec.msfc.nasa.gov/hq/library/v-reg.htm>

(End of provision)

L.2 LISTING OF FEDERAL ACQUISITION REGULATION (48 CFR
CHAPTER 1) PROVISIONS INCORPORATED BY REFERENCE

<u>PROVISION</u>	<u>TITLE</u>
FAR 52.211-6	BRAND NAME OR EQUAL (AUG 1999)
FAR 52.215-1	INSTRUCTIONS TO OFFERORS - COMPETITIVE ACQUISITION (JAN 2004)
FAR 52.222-23	NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY FOR CONSTRUCTION (FEB 1999) Fill-In: (b) Minority participation goal: 10.7% Female participation goal: 6.9% Fill-In: (e) Kennedy Space Center and Cape Canaveral Air Force Station, Brevard County, Florida
FAR 52.228-1	BID GUARANTEE (SEP 1996) Fill-In: para (c) The amount of the bid guarantee shall be 20% of the bid price or \$3M, whichever is less.
FAR 52.236-28	PREPARATION OF PROPOSALS – CONSTRUCTION (OCT 1997)

NASA/KSC SOLICITATION NNK12435778R
SECTION L – INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS OR
RESPONDENTS

L.3 LISTING OF FEDERAL ACQUISITION REGULATION (48 CFR
CHAPTER 1) PROVISIONS INCORPORATED IN FULL TEXT

FAR 52.211-1 AVAILABILITY OF SPECIFICATIONS LISTED IN
THE GSA INDEX OF FEDERAL SPECIFICATIONS,
STANDARDS AND COMMERCIAL ITEMS
DESCRIPTIONS, FPMR Part 101-29 (AUG 1998)

- (a) The GSA Index of Federal Specifications, Standards and Commercial Item Descriptions, FPMR Part 101-29, and copies of specifications, standards, and commercial item descriptions cited in this solicitation may be obtained for a fee by submitting a request to—

GSA Federal Supply Service
Specifications Section, Suite 8100
470 East L'Enfant Plaza, SW
Washington, DC 20407
Telephone (202) 619-8925
Facsimile (202) 619-8978.

- (b) If the General Services Administration, Department of Agriculture, or Department of Veterans Affairs issued this solicitation, a single copy of specifications, standards, and commercial item descriptions cited in this solicitation may be obtained free of charge by submitting a request to the addressee in paragraph (a) of this provision. Additional copies will be issued for a fee.

(End of provision)

FAR 52.211-3 AVAILABILITY OF SPECIFICATIONS NOT LISTED IN
THE GSA INDEX OF FEDERAL SPECIFICATIONS,
STANDARDS AND COMMERCIAL ITEM DESCRIPTIONS
(JUN 1988)

The specifications cited in this solicitation may be obtained from:

- (a) KSC specifications and standards may be obtained through a web site maintained by the KSC Technical Library. These documents may be accessed at:

<http://www-lib.ksc.nasa.gov/lib/gp364.html>

- (b) NASA specifications are available at <http://standards.nasa.gov/>. This website requires Public Access registration (Logon Required).

NASA/KSC SOLICITATION NNK12435778R

SECTION L – INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS OR RESPONDENTS

- (c) The Acquisition Streamlining and Standardization Information System (ASSIST) is a web based system for military and federal specifications and standards. Managed by the DoD Single Stock Point (DoDSSP), Philadelphia, ASSIST-Online provides public access to standardization documents over the Internet. These documents are available at <http://assist.daps.dla.mil>; or by submitting a request to the-

Department of Defense Single Stock Point (DoDSSP)
Building 4, Section D
700 Robbins Avenue
Philadelphia, PA 19111-5094
Telephone (215) 697-2179
Facsimile (215) 697-1462

- (d) Other Government Standards, Specifications, and other Technical Documents incorporated by reference in this solicitation may be obtained from:

John F. Kennedy Space Center, NASA
Specification & Standards Section
Mail Code: LIBRARY-D
Kennedy Space Center, FL 32899
Telephone (321) 867-3603 (Collect calls will not be accepted)

The request should identify the solicitation number and the specification requested by date, title, and number, as cited in the solicitation.

- (e) Voluntary standards, such as industrial, manufacturing, independent laboratory, society, and institutional associations (non-Government organizations) codes, standards, specifications, and technical documents incorporated by reference in this solicitation must be obtained, at the bidder's expense, from the organization that develops, establishes and/or publishes those documents.

(End of provision)

FAR 52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a Firm Fixed Price contract resulting from this solicitation.

(End of provision)

**FAR 52.222-5 DAVIS BACON ACT-SECONDARY SITE OF THE WORK
(JUL 2005)**

NASA/KSC SOLICITATION NNK12435778R

SECTION L – INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS OR RESPONDENTS

- (a)
 - (1) The offeror shall notify the Government if the offeror intends to perform work at any secondary site of the work, as defined in paragraph (a)(1)(ii) of the FAR clause at 52.222-6, Davis-Bacon Act, of this solicitation.
 - (2) If the offeror is unsure if a planned work site satisfies the criteria for a secondary site of the work, the offeror shall request a determination from the Contracting Officer.
- (b)
 - (1) If the wage determination provided by the Government for work at the primary site of the work is not applicable to the secondary site of the work, the offeror shall request a wage determination from the Contracting Officer.
 - (2) The due date for receipt of offers will not be extended as a result of an offeror's request for a wage determination for a secondary site of the work.

(End of provision)

FAR 52.225-10 NOTICE OF BUY AMERICAN ACT REQUIREMENT – CONSTRUCTION MATERIALS (FEB 2009)

- (a) *Definitions.* “Commercially available off-the-shelf (COTS) item,” “construction material,” “domestic construction material,” and “foreign construction material,” as used in this provision, are defined in the clause of this solicitation entitled “Buy American Act--Construction Materials” (Federal Acquisition Regulation (FAR) clause 52.225-9).
- (b) *Requests for determinations of inapplicability.* An offeror requesting a determination regarding the inapplicability of the Buy American Act should submit the request to the Contracting Officer in time to allow a determination before submission of offers. The offeror shall include the information and applicable supporting data required by paragraphs (c) and (d) of the clause at FAR 52.225-9 in the request. If an offeror has not requested a determination regarding the inapplicability of the Buy American Act before submitting its offer, or has not received a response to a previous request, the offeror shall include the information and supporting data in the offer.
- (c) *Evaluation of offers.*
 - (1) The Government will evaluate an offer requesting exception to the requirements of the Buy American Act, based on claimed unreasonable cost of domestic construction material, by adding to the offered price the appropriate percentage of the cost of such foreign

NASA/KSC SOLICITATION NNK12435778R

SECTION L – INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS OR RESPONDENTS

construction material, as specified in paragraph (b)(3)(i) of the clause at FAR 52.225-9.

- (2) If evaluation results in a tie between an offeror that requested the substitution of foreign construction material based on unreasonable cost and an offeror that did not request an exception, the Contracting Officer will award to the offeror that did not request an exception based on unreasonable cost.

(d) Alternate offers.

- (1) When an offer includes foreign construction material not listed by the Government in this solicitation in paragraph (b)(2) of the clause at FAR 52.225-9, the offeror also may submit an alternate offer based on use of equivalent domestic construction material.
- (2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of the clause at FAR 52.225-9 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.
- (3) If the Government determines that a particular exception requested in accordance with paragraph (c) of the clause at FAR 52.225-9 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic construction material, and the offeror shall be required to furnish such domestic construction material. An offer based on use of the foreign construction material for which an exception was requested—
 - (i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or
 - (ii) May be accepted if revised during negotiations.

(End of provision)

FAR 52.233-2 SERVICE OF PROTEST (SEP 2006)

- (a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the

NASA/KSC SOLICITATION NNK12435778R
SECTION L – INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS OR RESPONDENTS

Government Accountability Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from:

Robert Glanowski
OP-CS, Room 2488
Headquarters Building,
Kennedy Space Center, Florida 32899

- (b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(End of provision)

FAR 52.236-27 SITE VISIT (CONSTRUCTION) (FEB 1995) - ALTERNATE I (FEB 1995)

- (a) The clauses at 52.236-2, Differing Site Conditions, and 52.236-3, Site Investigations and Conditions Affecting the Work, will be included in any contract awarded as a result of this solicitation. Accordingly, offerors or quoters are urged and expected to inspect the site where the work will be performed.
- (b) An organized site visit has been scheduled for: **Wednesday, 6/6/2012 at 9:00 a.m.**
- (c) Participants will meet at:
- KSC Badging Office (take S.R. 405 east from U.S. Highway 1, past the KSC Visitor Complex, located on the right side of the road before KSC Gate 3)**
- (d) Attendance is limited to three representatives from each prospective prime offeror. To attend the site visit, each representative must fill out and submit (in advance of the site visit) the following badge request form(s):

KSC Form 28-889V2, KSC Visitor Badge Request (See Section L, Appendix 2)

KSC Form 28-1223 NS (PA), KSC Visitor TAA Request (See Section L Appendix 3)

- (e) Submit the badge request form(s), via e-mail, to: **Jessica.L.Smith@NASA.GOV**
- (f) Badge Request Form(s) Due Date: 5/31/2012
- (g) Badge requests received after the due date will not be considered (Be advised that badge requests may be rejected for failure to fill in all the required information:

NASA/KSC SOLICITATION NNK12435778R

SECTION L – INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS OR RESPONDENTS

names, titles, SSNs, citizenship, etc). **BADGES WILL BE PROVIDED TO U.S. CITIZENS ONLY. RESIDENT ALIENS AND FOREIGN NATIONALS WILL NOT BE BADGED FOR ACCESS TO KSC.**

(h) Site visit participants will be responsible for:

- Providing their own transportation
- Bringing two (2) forms of identification with them
- Picking up badges BEFORE THE SITE VISIT at the KSC Badging Office (take S.R. 405 east from U.S. 1, past the KSC Visitor Complex, located on the right before KSC Gate 3). KSC Badging Office hours are Monday through Friday, 6:00A.M. to 4:00P.M. It is recommended you arrive at least 90 minutes prior to the site visit to obtain badges.
- Reporting to the site visit
- Providing a hard hat, closed toed safety shoes and long pants

(i) Visitors on KSC are allowed to possess and use photographic equipment and materials EXCEPT IN CONTROLLED AREAS. At the site visit meeting you will be notified as to the current status of the area.

(j) The site visit is expected to last 2 hours.

(End of provision)

L.4 LISTING OF NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) PROVISIONS INCORPORATED BY REFERENCE

PROVISION NO.	TITLE
NFS 1852.228-73	BID BOND (OCT 1998)
NFS 1852.245-81	LIST OF AVAILABLE GOVERNMENT PROPERTY (JAN 2011)

FILL-IN: Paragraph (a): See Attachment J-B, Article J-B-20

L.5 LISTING OF NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) PROVISIONS INCORPORATED IN FULL TEXT

NASA/KSC SOLICITATION NNK12435778R
SECTION L – INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS OR
RESPONDENTS

NFS 1852.215-81

PROPOSAL PAGE LIMITATIONS (FEB 1998)

- (a) The following page limitations are established for each portion of the proposal submitted in response to this solicitation.

Proposal Section	Page Limit
Technical Experience Summary	Limited to two (2) pages per each project identified in the Technical Experience Summary
Technical Experience Resumes	Limited to one (1) page per each resume
Past Performance Data From Prior Customers (Optional)	Limited to three (3) pages of information for each project identified in the Technical Experience Summary
Page 1 of Past Performance Questionnaires	Limited to one (1) copy of page 1 of each Past Performance Questionnaire mailed to each customer
Safety and Occupational Health Plan	No page limit APPLICABLE TO ALL OFFERORS (The Plan shall be divided into two sections: Safety Past Performance Information and Safety and Health Plan)
Small Business Subcontracting Plan	No Page Limit (Applicable to Large Businesses Only)
Small Business Subcontracting Goals Table (See Section L Appendix 5)	No page limit. APPLICABLE TO ALL OFFERORS (Large Businesses may include its Small Business Subcontracting Goals Table in its Small Business Subcontracting Plan)
Commitment to the Small Business Program Narrative	No page limit APPLICABLE TO ALL OFFERORS (Large Businesses may include its Commitment to the Small Business Program in its Small Business Subcontracting Plan)

- (b) A page is defined as one side of a sheet, 8 1/2" x 11", with at least one inch margins on all sides, using not smaller than 12 point type. Foldouts count as an equivalent number of 8 1/2" x 11" pages. The metric standard format most closely approximating the described standard 8 1/2" x 11" size may also be used.
- (c) Title pages and tables of contents are excluded from the page counts specified in paragraph (a) of this provision. In addition, the Cost section of your proposal is not page limited.

NASA/KSC SOLICITATION NNK12435778R
SECTION L – INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS OR
RESPONDENTS

However, this section is to be strictly limited to cost and price information. Information that can be construed as belonging in one of the other sections of the proposal will be so construed and counted against that section's page limitation.

- (d) If final revisions are requested, separate page limitations will be specified in the Government's request for that submission.
- (e) Pages submitted in excess of the limitations specified in this provision will not be evaluated by the Government and will be returned to the offeror.

NFS 1852.223-73 SAFETY AND HEALTH PLAN (NOV 2004) (Modified)

The offeror shall submit a detailed safety and occupational health plan as part of its proposal. Failure to submit an acceptable plan shall make the offeror ineligible for the award of a contract. The plan shall describe in detail the policies, procedures, and techniques that will be used to ensure the safety and occupational health of contractor employees and to ensure safe working conditions throughout the performance of the contract.

The plan shall describe in detail the policies, procedures, and techniques that will be used to ensure the safety and occupational health of the public, astronauts and pilots, the NASA workforce (including contractor employees working on NASA contracts). The plan shall also address the protection of the environment, high-valued equipment, and property.

As a minimum, the Safety and Health Plan shall include the following:

a. Safety Past Performance Information

1. Contractor's Corporate Safety Program objectives to include safety policy statement.
2. A copy of the Contractor's Log of Occupational Injuries and Illnesses (OSHA 300) and Annual Summary of Occupational Injuries and Illnesses (OSHA 300A) or equivalent for the previous three (3) years as described in Title 29, Code of Federal Regulations, Subpart 1904.5. If the contractor is exempt by regulation from maintaining and publishing such logs, equivalent data in contractor's format is acceptable (such as loss runs from insurance carrier) which contains the data required. Data shall be compiled and reported by calendar year.
3. Documented evidence of Experience Modification Rate (EMR) for the previous three (3) years.
4. Days Away, Restricted or Transferred Rate (DART) for the previous three (3) years under NAICS Code - 238210 Electrical Contractors and Other Wiring Installation Contractors. The data shall include incidence rates of days away from work, job transfer, or restriction cases, occupational injuries and illnesses, by quartile distribution and employment size group, private industry as most recently published by the Bureau

NASA/KSC SOLICITATION NNK12435778R

SECTION L – INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS OR RESPONDENTS

of Labor Statistics.

5. Total Case Incident Rate (TCIR) for the previous three (3) years under NAICS Code NAICS Code - 238210 Electrical Contractors and Other Wiring Installation Contractors. The data shall include incidence rates of total recordable cases of occupational injuries and illnesses, by quartile distribution and employment size group, private industry as most recently published by the Bureau of Labor Statistics.

b. Safety and Health Plan

1. A discussion on how the Contractor intends to comply with 29 CFR 1926 Safety & Health Regulations for Construction, NPR 8715.3 (NASA Safety Manual & Appendices), KNPR 8715.3 (KSC Safety Practices Procedural Requirements) and 8715.7 (KSC Construction Contractor Safety & Health Practices Procedural Requirements Rev A with regard to all safety issues that will be encountered on this project. [KNPR 8715.3, KNPR 8715.7, and KSC-UG-2814, REV A-1 (KSC Construction Contractors Safety and Health Practices Users Guide) can be accessed at <http://tdglobal.ksc.nasa.gov/ReferencedDocuments/>.]

NOTE: KSC-UG-2814 contains a Safety and Occupational Health Plan template (Pages 56-100 that should be used for the Safety and Occupational Health Plan.

2. Hazard Analysis: The contractor shall describe the process to be used to analyze worksite hazards or Job Hazard Analysis (JHA) prior to the start of work to ensure that all hazards are abated. These analyses may address facilities, systems/subsystems, operations, processes, materials (including waste), and specific tasks or jobs.
3. Emergency Procedures: Procedures for emergency actions to be taken to secure dangerous conditions, to protect personnel, and secure work areas in the event of accident or an act of nature.
4. The Plan shall describe the contractor's training program including identification of responsibility for training employees to assure understanding of safe work practices, hazard recognition, and appropriate responses including protective and/or emergency countermeasures. The Plan shall include a discussion on how the contractor will validate that training requirements have been conducted and satisfied (i.e., physical examination, testing, on-the-job performance, etc). The Plan shall state all training materials and training records will be provided for NASA review on request.
5. The plan shall similarly address subcontractor employee safety and occupational health for those subcontractors who will be performing work under the contract when one or more of the following conditions apply: (Note: Contractors may not delegate overall site safety responsibility or authority for any personnel working under the provisions of this section to any subcontractor.)

NASA/KSC SOLICITATION NNK12435778R

SECTION L – INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS OR RESPONDENTS

- (i) The work will be conducted completely or partly on premises owned or controlled by the government.
- (ii) The work includes construction, alteration, or repair of facilities in excess of the simplified acquisition threshold.
- (iii) The work, regardless of place of performance, involves hazards that could endanger the public, astronauts and pilots, the NASA workforce (including Contractor employees working on NASA contracts), or high value equipment or property, and the hazards are not adequately addressed by Occupational Safety and Health Administration (OSHA) or Department of Transportation (DOT) regulations (if applicable).
- (iv) When the assessed risk and consequences of a failure to properly manage and control the hazards warrants use of the clause.

This plan, as approved by the Contracting Officer, will be incorporated into the contract.

NFS 1852.233-70 PROTESTS TO NASA (OCT 2002)

Potential bidders or offerors may submit a protest under 48 CFR Part 33 (FAR Part 33) directly to the Contracting Officer. As an alternative to the Contracting Officer's consideration of a protest, a potential bidder or offeror may submit the protest to the Assistant Administrator for Procurement, who will serve as or designate the official responsible for conducting an independent review. Protests requesting an independent review shall be addressed to Assistant Administrator for Procurement, NASA Code H, Washington, DC 20546-0001.

(End of provision)

NFS 1852.236-74 MAGNITUDE OF REQUIREMENT (DEC 1988)

The Government estimated price range of this project is between \$1,000,000 and \$5,000,000.

**L.6 KSC 52.214-90 DELIVERY INSTRUCTIONS FOR BIDS/PROPOSALS
(AUG 2005)**

a. Delivery Address:

All offers (bids or proposals) shall be delivered to the Central Industry Assistance Office (CIAO), 7110 N. Courtenay Parkway, Merritt Island, FL, 32953 on or before the date and time set for receipt of proposals or bids. The CIAO is located on state Road 3, approximately 2 miles south of Gate 2 to KSC. Access to KSC is not required.

b. Hand-Delivered Offers:

NASA/KSC SOLICITATION NNK12435778R
SECTION L – INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS OR
RESPONDENTS

Offerors are responsible for assuring that hand-carried bids are either received by NASA Government employees at the CIAO or dropped in the CIAO mail box located outside of the building.

c. Late Delivery of Offers/Bids:

Late offers/bids will be processed in accordance with FAR 214-7, "Late Submissions, Modifications and Withdrawals of Bids," FAR 52.215-1, "Instructions to Offerors - Competitive Acquisition," FAR 52.212-1, "Instructions to Offerors – Commercial Items," or FAR 52.214-23, "Late Submission, Modifications, and Withdrawals of Technical Proposals Under Two-Step Sealed Bidding," included in this solicitation.

(End of Provision)

L.7 PROPOSAL IDENTIFICATION

Sealed packages containing proposals shall be marked to show the offeror's name and address and be addressed as follows:

Attn: ROBERT GLANOWSKI
NASA CONTRACT SPECIALIST, OP-CS
SOLICITATION NNK12435778R
TITLE OF PROJECT: REPLACE CHILLED WATER CONTROLS,
KENNEDY SPACE CENTER INDUSTRIAL AREA, PCN: 97697

UNSEALED PROPOSAL PACKAGES DELIVERED TO THE CIAO WILL NOT BE ACCEPTED.

L.8 COMMUNICATIONS REGARDING THIS SOLICITATION

- (a) Questions or comments regarding this solicitation must be submitted via email, cite the solicitation number, and be directed to the following Government representative:

Name: Robert Glanowski
Email: robert.glanowski@nasa.gov
Address: NASA John F. Kennedy Space Center,
Mail Stop: OP-CS
Kennedy Space Center, Florida 32899

- (b) Questions should be submitted on the attached Question/Comment Form, in MS Word or equivalent (no PDF or read only) format or in the body of the e-mail message (in the same format as listed on the Question/Comment Form, Appendix 2 to Section L of this solicitation). Questions shall be sent to the

NASA/KSC SOLICITATION NNK12435778R
SECTION L – INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS OR
RESPONDENTS

Contracting Officer identified above by **6/8/2012** to allow for analysis and dissemination of responses in advance of the proposal due date. Questions received after this date will be considered but may be answered. **Oral questions will not be accepted.**

- (c) Questions or comments shall not be directed to the technical activity personnel.

(End of provision)

L.9 GENERAL PROPOSAL PREPARATION INSTRUCTIONS

The solicitation, drawings, and specifications are available only through the Federal Business Opportunities website, (FEDBIZOPPS) (<http://www.fbo.gov>). No hard copies, CD's or other media will be provided by the Government. It is the responsibility of the potential offerors to download the documents posted on FEDBIZOPPs.

- (a) The Government intends to make award without holding discussions with offerors. By submitting an offer in response to this solicitation, offerors are agreeing to comply with all terms and conditions contained in the solicitation. Offerors are cautioned to carefully follow the instructions set forth herein.
- (b) This solicitation DOES NOT invite offerors to submit alternate proposals. The Contracting Officer may reject any offer containing exceptions. Therefore, offerors are encouraged to include their best terms and conditions in the initial offer. If, despite the warning given in this paragraph, the offeror elects to include exceptions, they must be specifically and clearly identified on a separate page. In this solicitation, the words “offer” and “proposal” are used interchangeably. (See definition of “offer” at FAR 2.101.)
- (c) A PROPERLY SUBMITTED OFFER SHALL CONSIST OF THE FOLLOWING:
 - (1) One original and two (2) signed copies of the SF 1442, Solicitation Offer and Award, with Blocks 14 through 20c completed and signed by an authorized representative of the offeror. The person signing the offer must initial each erasure or change appending the offer.
 - (2) Three copies of page 1 of all amendments issued, signed by an authorized representative of the offeror. (This requirement only applies if amendment receipts are not acknowledged on the signed SF 1442 submitted).
 - (3) Completion of Section K representations and certifications on-line at the Online Representations and Certifications Application (ORCA) website as required by FAR Provision 52.204-8, Annual Representations and Certifications, incorporated in full text in Section K of this solicitation.

NASA/KSC SOLICITATION NNK12435778R

SECTION L – INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS OR RESPONDENTS

- (4) Two (2) copies of offeror's Technical Experience Summary in accordance with Article L.10, Non-Price Factors
- (5) Two (2) copies of Past Performance Data From Prior Customers in accordance with Article L.10, Non-Price Factors (optional)
- (6) Two (2) copies of Page 1 of the Past Performance Questionnaires that the offeror provided to each past performance point of contact in accordance with Article L.5 - NFS 1852.215-8. (The past performance questionnaire is provided as Appendix 1 to Section L. of this solicitation)
- (7) Two (2) copies of offeror's Safety and Health Plan in accordance with NFS 1852.223-73.
- (8) One (1) properly executed bid bond in accordance with NFS 1852.228-73. A copy of Standard Form 24, Bid Bond, May be downloaded at:

<http://www.gsa.gov/Portal/gsa/ep/formslibrary.do?formType=SF>
- (9) Two (2) copies of offeror's Small Business Subcontracting Plan (Applicable to large businesses only)
- (10) Two (2) copies of offeror's Small Business Subcontracting Goals Table (See Section L Appendix 5) (Applicable to both large and small businesses)
- (11) Two (2) copies of offeror's Commitment to the Small Business Program Narrative (See Section L Provision L.10(d), Small Business Utilization (Applicable to both large and small businesses)
- (12) Joint Ventures shall provide a copy of the Joint Venture agreement and specifically identify who the controlling entity will be for this contract.

Incomplete proposals may be a basis for determination of unacceptability of the proposal and removal of the proposal from consideration.

By submitting an offer in response to this solicitation, the offeror is agreeing to comply with all terms and conditions contained in the solicitation. The terms and conditions of the solicitation, including any amendments, shall take precedence over the offeror's proposal unless the proposal is incorporated into the contract by specific reference.

(End of provision)

L. 10 NON-PRICE FACTORS

The government will evaluate the non-price factors of Technical Experience, Past Performance,

NASA/KSC SOLICITATION NNK12435778R
SECTION L – INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS OR
RESPONDENTS

Safety and Occupational Health Plan, and Small Business Utilization. Each offeror shall provide the following Non-Price Factors documentation as part of its proposal:

a. TECHNICAL EXPERIENCE

1. Offerors proposing a teaming arrangement utilizing major subcontractors shall identify the scope of work that will be performed by the prime contractor (example; contract administration, environmental management, mechanical, etc.) and the scope of work that will be performed by the major subcontractor(s) (example; all controls work, PLC and SCADA programming, testing, etc.). The term “Major Subcontractor” is defined as any subcontractor whose effort on this acquisition is projected to be more than 35% of the proposed contract value.
2. Offerors shall provide a Technical Experience Summary identifying three (3) contracts each for the prime contractor as well as for proposed major subcontractor(s) completed within five (5) years of the date of issuance of this solicitation NNK12435778R 5/25/2012 (including Federal, State, and local government and private) similar in size, content, and complexity to the instant Government acquisition.
3. The Technical Experience Summary is specifically limited to no more than three (3) completed contracts for the prime contractor and no more than three (3) completed contracts for each of its major subcontractors.
4. Offerors with no recent and/or relevant projects it has itself performed (as an entity), shall submit technical experience summary data on completed contracts that proposed contractor key personnel have participated in within the past five (5) years, if key personnel have participated in such projects. Information on these projects is limited to three (3) completed contracts and shall be provided as described below. The Technical Experience Summary shall identify the names of the individuals and their roles in the specific projects.
5. Offerors with no recent and/or relevant projects it has itself performed (as an entity), shall submit Technical Experience Summary data on completed contracts performed by predecessor companies within the past five years, if predecessor companies have participated in such projects. Information on these projects is limited to three (3) completed contracts and shall be provided as described below. The Technical Experience Summary shall identify the names of the predecessor companies.
6. The Technical Experience Summary shall be limited to two pages of information for each completed contract and include the following information for each referenced contract or project:

Name of project and contract/order number

NASA/KSC SOLICITATION NNK12435778R
SECTION L – INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS OR
RESPONDENTS

North American Industry Classification System (NAICS) code project was performed under

Type of contract/order (fixed-price or cost reimbursable)

Dates of the contract performance period as initially awarded

Dates of the actual completed performance period

Place of contract performance

Name and address of customer or Government Agency

Name, telephone number and e-mail address of Contracting Officer or equivalent customer contact

Dollar value of contract/order as initially awarded; break out major subcontract values

Dollar value of contract/order at completion

A brief discussion on why the selected contract demonstrates technical experience needed to meet the technical performance requirements of this project as described in section M.1 of this solicitation.

Discussions on problems encountered (if applicable) during contract performance to include, but not limited to, challenges to successfully completing the project on schedule; safety violations/discrepancies; Department of Labor violations/discrepancies; non-payment of employees, subcontractors, and/or suppliers; and terminations. Offerors shall also discuss the offeror's corrective actions relative to the identified problems.

Discussions on contract changes resulting in large dollar value and/or schedule increases.

A discussion on contract requirements concerning subcontracting plan goals for small disadvantaged business concerns, monetary targets for small disadvantaged business participation and notifications submitted under FAR 19.1202-4(b). (Applicable only to offerors who are large businesses)

7. Offerors shall provide a brief resume for the following key personnel:
 - a. Key person proposed for programming the Modicon Quantum PLCs using the Concept programming tool.

NASA/KSC SOLICITATION NNK12435778R

SECTION L – INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS OR RESPONDENTS

- b. Key person proposed for integrating the PLC control system to the central servers and operator workstations using the Citect SCADA Software.

Resumes may not exceed one page per resume and must include the following information:

Name and job title

Proposed project assignment

Name of employer

Summary of programming and/or integration experience similar to the work required under this contract

Summary of other qualifications including training relevant to programming and/or SCADA integration requirements

b. PAST PERFORMANCE

1. Offerors shall provide the Past Performance Questionnaire (Appendix 1 to Section L of this solicitation) to each past performance Contracting Officer or customer contact equivalent identified in its Technical Experience Summary (to include Contracting Officers or customer contact equivalents of proposed major subcontractors). Offerors shall request these customers to submit the completed questionnaires via e-mail to the address below to arrive not later than the proposal submission date. Past Performance Questionnaires will not be accepted directly from offerors. Questionnaires shall be returned directly from the offeror's past performance source to the Contract Specialist listed below:

Name: Robert Glanowski
Email: robert.glanowski@nasa.gov
Address: NASA John F. Kennedy Space Center,
Mail Stop: OP-CS
Kennedy Space Center, Florida 32899

2. Offerors shall submit, with their proposals, copies of the first page of each past performance questionnaire that the offeror sends to each customer contact identified in its Technical Experience Summary. NOTE: The offeror is required to complete the "THIS SECTION TO BE COMPLETED BY THE OFFEROR" area prior to sending the questionnaire to its customer.

3. Offerors may provide statements, letters, reports or evaluations from prior customers indicating the level and quality of past performance on the contracts/projects listed in the

NASA/KSC SOLICITATION NNK12435778R

SECTION L – INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS OR RESPONDENTS

Technical Experience Summary. This supplemental information shall not exceed three (3) pages of information for each contract/project reference in your Technical Experience Summary. This is an optional requirement.

c. SAFETY AND OCCUPATIONAL HEALTH PLAN

Offerors shall submit two copies of their Safety and Occupational Health Plan with their proposal. The Plan shall consist of two parts: Safety Past Performance Information and Safety and Health Plan. NFS 1852.223-73, Safety and Health Plan (NOV 2004), incorporated in full text in Section L.5 of this solicitation details what shall be included in the Safety and Occupational Health Plan.

d. SMALL BUSINESS UTILIZATION

NASA is committed to providing small business concerns, women-owned small business concerns, small disadvantaged business concerns, veteran-owned small business concerns, service-disabled small business concerns, HUBZone small business concerns, and historically black colleges and universities/minority institutions, maximum practicable opportunities to participate in Agency acquisitions at the prime contract level. The participation of NASA prime contractors in providing subcontracting opportunities to such entities is also an essential part of the Agency's commitment.

1. Small Business Subcontracting Plan (Applicable to Large Business Concerns Only)

This solicitation contains FAR clause 52.219-9, "Small Business Subcontracting Plan with Alternate II" which requires all offerors, **except small businesses**, to submit a Small Business Subcontracting Plan, including the associated subcontracting percentage goals and subcontracting dollars, with their proposal. The requirements in the Plan must flow down to first tier large business subcontracts expected to exceed \$1,500,000. (Although first tier large business subcontractors are encouraged to meet or exceed the stated goals, it is recognized that the subcontracting opportunities available to these subcontractors may differ from those suggested in the solicitation based upon the nature of their respective requirements.)

The acceptable Small Business Subcontracting Plan shall be incorporated in Section J as an attachment to the resulting contract. **(Small businesses are not required to submit Small Business Subcontracting Plans; however, small businesses are required to indicate the amount of effort proposed to be done by a small business either at the prime level or at the first tier subcontract level as discussed in paragraph 2 below.)**

NASA/KSC SOLICITATION NNK12435778R

SECTION L – INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS OR RESPONDENTS

2. Small Business Subcontracting Goals (Applicable to both Large and Small Business Concerns)

All offerors (both large and small businesses) shall complete and submit, with their proposal, Appendix 5, SMALL BUSINESS SUBCONTRACTING GOALS, which provides a breakdown of the offeror's proposed goals, by small business category, expressed in terms of both a percentage of TOTAL CONTRACT VALUE and a percentage of TOTAL PLANNED SUBCONTRACTS. Offerors shall modify the appendix to show the proposed subcontracting goals for the basic contract requirement and each option separately.

The Contracting Officer's assessment of appropriate subcontracting goals for this acquisition, expressed as a percentage of TOTAL CONTRACT VALUE (basic and all options combined), is as follows:

Small Businesses	3%
Women Owned Small Business Concerns (WOSB)	0.56%
Small Disadvantaged Business Concerns (SDB)	0.43%
Veteran Owned Small Business Concerns (VOSB)	1.03%
Service-Disabled Veteran-Owned Small Business Concerns (SDVOSB)	0.69%
HUBZone Small Business Concerns (HBZ)	0.30%
Historically Black Colleges and Universities (HBCU)/Minority Institutions(MI)	0%

The numbers above reflect the Contracting Officer's assessment of the appropriate subcontracting goals to be achieved at the completion of contract performance. Offerors must perform an independent assessment of the small business subcontracting opportunities. Offerors are encouraged to propose goals that are equivalent to or greater than those recommended by the Contracting Officer. Offerors shall discuss the rationale for any goal proposed that is less than the Contracting Officer's recommended goal in any category. In addition, the Offeror shall describe the efforts made to establish a goal for that category and what ongoing efforts, if any, the Offeror plans during performance to increase participation in that category. (Applicable to large business concerns only: If it is anticipated that the proposed small business goals will not be met by the submission of the first Individual Subcontracting Report (ISR) for this effort as required by 52.219-9 Small Business Subcontracting Plan, the Offeror should discuss their approach to include a timeline for meeting these goals and the rationale for it.)

3. Commitment to the Small Business Program (Applicable to both large and small business concerns)

NASA/KSC SOLICITATION NNK12435778R

SECTION L – INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS OR RESPONDENTS

All Offerors are required to provide, with their proposals, a narrative responding to the Commitment to the Small Business Program.

Offerors shall briefly describe work that will be performed by small businesses. Proposals should also identify any work to be subcontracted that is considered “high technology.” “High technology” is defined as research and development efforts that are within or advance the state-of-the-art in technology discipline and are performed primarily by professional engineers, scientists, and highly skilled and trained technicians or specialists.

If the subcontractor(s) is known, offerors must connect the work to the subcontractor and specify the extent of commitment to use the subcontractor (s) (i.e., firm or tentative commitment). (Small business offerors shall provide this information to the extent subcontracting opportunities exist in their approach to performing the requirement.)

All offerors shall provide information demonstrating the extent of commitment to utilize small business concerns and to support their development. Information provided should include a brief description of established or planned procedures and organizational structure for Small Business outreach, assistance, participation in the Mentor Protégé program, counseling, market research and Small Business identification, and relevant purchasing procedures. For large businesses, this information should conform to applicable portions of the submitted Small Business Subcontracting Plan. (Small business offerors shall provide this information to the extent subcontracting opportunities exist in their approach to performing the requirement.)

(End of provision)

L. 11 CONTRACTOR RESPONSIBILITY

The assessment of past performance information is separate from the FAR Subpart 9.1 responsibility determination the contracting officer will make prior to award of a contract under this solicitation.

L. 12 APPENDICES TO SECTION L

This Section L is supplemented with the following appendices:

Appendix 1 Question & Comment Form

Appendix 2 KSC Form 28-889V2, KSC Visitor Badge Request

NASA/KSC SOLICITATION NNK12435778R

**SECTION L – INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS OR
RESPONDENTS**

Appendix 3	KSC Form 28-1223 NS (PA), KSC Visitor TAA Request
Appendix 4	Past Performance Questionnaire
Appendix 5	Small Business Subcontracting Goals

NASA/KSC SOLICITATION NNK12435778R
SECTION L/APPENDIX 1
QUESTION/COMMENT FORM

Questions or comments regarding this solicitation must be submitted via email to the Contracting Officer identified below.

Name: Robert Glanowski
Email: robert.glanowski@nasa.gov
Address: NASA John F. Kennedy Space Center,
Mail Stop: OP-CS
Kennedy Space Center, Florida 32899

Questions shall be submitted on this form in MS Word or equivalent (no PDF or read only formats). Questions also may be submitted in the body of an e-mail message following this form's format. Late questions or comments will be considered by the Government but may not be answered. Responses to questions will be issued as amendments to the solicitation. The cutoff date and time for receipt of questions is **6/8/2012 by 3:00 p.m.**

Offerors are cautioned that technical activity personnel are not authorized to answer solicitation questions or comments and that any responses from them may not accurately represent the Government's official position.

PLEASE CITE THE REFERENCE NUMBER SUCH AS PAGE NUMBER OF THE RFP, SPEC, DWGS, ETC, IF APPLICABLE.

1. REFERENCE:

QUESTION:

2. REFERENCE:

QUESTION:

Submitted by (name):

Company:

E-mail Address:

NASA/KSC SOLICITATION NNK12435778R
SECTION L/APPENDIX 2
KSC VISITOR BADGE REQUEST

KSC VISITOR BADGE REQUEST

Fax No. 867-4854

Mail Code: KSC Badging Office

Phone No. 867-7763

Date of Request _____

Date of Visit: Start Date _____ End Date _____

Badge Type: White-Unescorted ☒ _____ Pink-Escorted: _____ Media _____

Area(s) to be Visited: Industrial Area

Purpose of Visit: Site Visit Job Site Contact: Larry Kiel 321-867-3780

Visitor Information

Name (last, first, mi) _____

Country of Citizenship _____ Date of Birth _____

Place of Birth (City, State) _____

SSN # _____ Naturalization # _____ Alien Reg # _____

Company Name _____

Company Address _____ City _____ State ____ Zip _____

Badging Official Information

Badging Authority Name (printed) _____

Badging Authority Company (printed) _____ Org. ID _____

Construction Contract No. (if applicable) _____ Code No. _____

Telephone No. _____ Fax No. _____ Other No. _____

THE ATTACHED INFORMATION IS PROTECTED BY THE "ACT" AND DISCLOSED AS PROVIDED BY NASA RULES
PART 1212 AND THE PROVISIONS OF 5 U.S.C. 552A.

ANY RELEASE OR USE OF THIS INFORMATION OTHER THAN THAT SPECIFICALLY STATED IS
PROHIBITED BY LAW. NOTICE

PRIVACY ACT 1974 PL 93-579

NASA/KSC SOLICITATION NNK12435778R
SECTION L/APPENDIX 3
KSC TAA BADGE REQUEST

KSC VISITOR RECORDS CENTER VISITOR TAA REQUEST

Fax No. 867-4854

Mail Code: SGS-VRC

Phone No. 867-7763

Name (*last, first, mi*) _____

SSN # _____ Date of Birth _____

Company Name _____

TAA Type: Yellow-Unescorted (needs PRP) ____ Pink-Escorted **x**

TAA list numbers requested **48, 50**

Date of Visit: Start Date _____ End Date _____

Name (*last, first, mi*) _____

SSN # _____ Date of Birth _____

Company Name _____

TAA Type: Yellow-Unescorted (needs PRP) ____ Pink-Escorted **x**

TAA list numbers requested **48, 50**

Date of Visit: Start Date _____ End Date _____

Name (*last, first, mi*) _____

SSN # _____ Date of Birth _____

Company Name _____

TAA Type: Yellow-Unescorted (needs PRP) ____ Pink-Escorted **x**

TAA list numbers requested **48,50**

Date of Visit: Start Date _____ End Date _____

Badging Official Information

Badging Authority Name (*printed*) _____

Badging Authority Company (*printed*) _____

Telephone No. _____ Fax No. _____ Other No. _____

Badging Authority Signature _____

NOTICE Privacy Act 1974 PL 93-579

The attached information is protected by the "ACT" and disclosed as provided by **NASA** rules Part 1212 and the provisions of 5 U.S.C. 552A.

Any release or use of this information **OTHER** than that specifically stated is **PROHIBITED** by law.

**NASA/KSC SOLICITATION NNK12435778R
SECTION L/APPENDIX 4
PAST PERFORMANCE QUESTIONNAIRE**

Design to Replace Chilled Water Controls, Industrial Area

NASA Kennedy Space Center's solicitation requires offerors to provide this Past Performance Questionnaire to customers to complete and return to NASA. Past performance raters are requested to submit the completed questionnaires to the contracting officer identified below via e-mail, to arrive not later than the proposal submission date.

Completed questionnaires should be sent to:

Name: Robert Glanowski
Email: robert.glanowski@nasa.gov
Address: NASA John F. Kennedy Space Center
Mail Stop: OP-CS
Kennedy Space Center, Florida 32899

Raters are requested to complete the questionnaire forms as written since altered or substituted questionnaires may not adequately address the information NASA will be evaluating.

**SECTION I. THIS SECTION TO BE COMPLETED BY THE OFFEROR AND MAJOR
SUBCONTRACTOR(s) (if utilized)**

Name of Contractor Being Evaluated: _____

Name of Project and Contract/Order Number: _____

Period of Contract Performance (dates): _____

Place of Contract Performance: _____

Contract Value at Award: _____

Contract Value at Completion or Current Contract Amount: _____

Contract Status (Prime or Subcontract?): _____

Point of Contact: (Rater) Name/Address/Office Phone Number/E-Mail Address:

**NASA/KSC SOLICITATION NNK12435778R
SECTION L/APPENDIX 4
PAST PERFORMANCE QUESTIONNAIRE**

THIS SECTION TO BE COMPLETED BY THE RATER

(THIS QUESTIONNAIRE, WHEN COMPLETED, SHALL NOT BE DISCLOSED TO ANYONE
OUTSIDE THE GOVERNMENT)

Name of Contractor Being Evaluated: _____

Name of Project and Contract/Order Number: _____

Period of Contract Performance (dates): _____

Place of Contract Performance: _____

Contract Value at Award: _____

Contract Value at Completion or Current Contract Amount: _____

Contractor's Status (Prime or Subcontractor?): _____

Percentage and Dollar Value of Work Performed by the Contractor:

Dates of Rater's Involvement in Program/Contract: _____

Brief Description of Work Performed:

Point of Contact: (Rater) Name/Address/Office Phone Number/E-Mail Address:

NASA/KSC SOLICITATION NNK12435778R
SECTION L/APPENDIX 4
PAST PERFORMANCE QUESTIONNAIRE

PLEASE RATE THE FOLLOWING:

On a scale of 1 to 5, with 1 being unsatisfactory and 5 being exceptional, please rate the contractor on the past performance areas included in this questionnaire. A rating of N/A should be used if the question is not applicable or the answer is unknown. Space is provided for any additional comments raters may want to provide. The definitions associated with the 1 to 5 ratings are provided below:

1. **UNSATISFACTORY:** Performance does (did) not meet most contractual requirements and recovery is not likely (did not occur). The contractual performance contains (contained) serious problem(s) for which the contractor's corrective actions appear ineffective (were ineffective).
2. **MARGINAL:** Performance does (did) not meet some contractual requirements. The contractual performance reflects (reflected) serious problem(s) for which the contractor has not yet identified acceptable corrective actions (did not provide acceptable corrective actions).
3. **SATISFACTORY:** Performance meets (met) contractual requirements. The contractual performance reflects (reflected) some minor problems. Corrective actions being taken by the contractor appear to be effective (Corrective actions taken were effective).
4. **VERY GOOD:** Performance meets (met) contractual requirements and exceeds (exceeded) some of the Government's expectations. The contractual performance reflects (reflected) some minor problems and corrective actions being taken by the contractor appear to be effective (Corrective actions taken were effective).
5. **EXCEPTIONAL:** Performance meets (met) contractual requirements and exceeds (exceeded) many of the Government's expectations. The contractual performance reflects (reflected) few minor problems and corrective actions taken by the contractor appear to be highly effective (corrective actions taken were effective).

N/A: Not applicable or rater has not observed performance in this area.

NASA/KSC SOLICITATION NNK12435778R
SECTION L/APPENDIX 4
PAST PERFORMANCE QUESTIONNAIRE
CONTRACTOR'S CONTRACT ADMINISTRATION PERFORMANCE QUESTIONS

1. The contractor's ability to provide prompt payment of employees, subcontractors, and suppliers for services and supplies performed/delivered under the contract.

1	2	3	4	5	NA
---	---	---	---	---	----

Comments:

2. The Contractor's compliance with the Davis Bacon Act and other labor requirements and resolution of reported violations/discrepancies.

1	2	3	4	5	NA
---	---	---	---	---	----

Comments:

3. The Contractor's compliance with contract subcontracting plan goals for small disadvantaged business concerns (see FAR 19.7), monetary targets for SDB participation (see FAR 19.1202), and notifications submitted under FAR 19.1202-4(b). (Applicable only to offerors who are large businesses).

1	2	3	4	5	NA
---	---	---	---	---	----

Comments:

4. Has the contractor's performance required the issuance of any cure notices, show cause letters, or terminations for cause/default? (Please circle Yes or No)

Yes	No				
-----	----	--	--	--	--

Comments:

NASA/KSC SOLICITATION NNK12435778R
SECTION L/APPENDIX 4
PAST PERFORMANCE QUESTIONNAIRE

5. Would you select this contractor again? (Please circle Yes or No)

Yes	No				
-----	----	--	--	--	--

Comments:

CONTRACTOR'S SAFETY PERFORMANCE QUESTIONS

6. Contractor maintained an effective safety and health program with visible management control and involvement.

1	2	3	4	5	NA
---	---	---	---	---	----

Comments:

7. The Contractor's ability to maintain a safety program ensuring subcontractors' safety performance was consistent with the prime contractor's safety program.

1	2	3	4	5	NA
---	---	---	---	---	----

Comments:

8. The Contractor's ability to analyze worksite hazards prior to the start of work to ensure that all hazards were abated.

1	2	3	4	5	NA
---	---	---	---	---	----

Comments:

NASA/KSC SOLICITATION NNK12435778R
SECTION L/APPENDIX 4
PAST PERFORMANCE QUESTIONNAIRE

9. The Contractor's ability to understand and comply with safety requirements.

1	2	3	4	5	NA
---	---	---	---	---	----

Comments:

10. The Contractor's ability to maintain a safety program that ensured the customer's critical resources were adequately protected with emergency procedures for securing dangerous conditions and protecting personnel during contract performance.

1	2	3	4	5	NA
---	---	---	---	---	----

Comments:

11. The Contractor's ability to resolve safety discrepancies in a timely and effective manner and the ability to report, investigate, and take corrective actions on safety accidents/incidents in a timely and effective manner

1	2	3	4	5	NA
---	---	---	---	---	----

Comments:

CONTRACTOR'S TECHNICAL PERFORMANCE QUESTIONS

12. The effectiveness of the Contractor's overall project management ability (including but not limited to project managers, quality control managers, safety managers, and superintendents); labor (skilled and unskilled workers); equipment; supplies; tools; and financial resources to successfully perform, provide contract deliverables and complete work in a safe and timely manner.

1	2	3	4	5	NA
---	---	---	---	---	----

NASA/KSC SOLICITATION NNK12435778R
SECTION L/APPENDIX 4
PAST PERFORMANCE QUESTIONNAIRE

Comments:

13. The Contractor's ability to provide immediate and effective contractor management attention at the job site and partner with the owner, engineers and O&M personnel to determine control system requirements, resolve technical problems and recover from scheduling variances

1	2	3	4	5	NA
---	---	---	---	---	----

Comments:

14. The Contractor's ability to provide quality engineering shop drawings and accurate complete-as-built documentation. Shop drawings include panel assembly drawings, end-to-end wiring diagrams, network diagrams, control system diagrams, PLC programs with comments, and O&M manuals.

1	2	3	4	5	NA
---	---	---	---	---	----

Comments:

15. The Contractor's ability to perform demolition of existing control system components with selective re-utilization of existing equipment and wiring. Phasing of control system replacement in a pre-planned construction sequence to minimize control system downtime and outages.

Yes	No				
-----	----	--	--	--	--

Comments:

NASA/KSC SOLICITATION NNK12435778R
SECTION L/APPENDIX 4
PAST PERFORMANCE QUESTIONNAIRE

16. The Contractor's ability to fabricate custom control panels and perform factor acceptance testing (FAT) to verify the control system responses to simulated inputs representing expected field conditions

1	2	3	4	5	N/A
---	---	---	---	---	-----

Comments:

17. The Contractor's ability to properly install, calibrate and integrate controls system instrumentation components such as smart temperature sensors, water flow meters, and pressure centers.

1	2	3	4	5	N/A
---	---	---	---	---	-----

Comments:

18. The Contractor's ability to fabricate, install, program and commission a distributed controls system consisting of multiple PLCs networked back to a central control location where operators can monitor and control the entire system via custom user interface graphics.

1	2	3	4	5	N/A
---	---	---	---	---	-----

Comments:

CONTRACTOR'S OVERALL CONTRACT PERFORMANCE

19. Would you select this contractor again? (Please circle Yes or No)

Yes	No				
-----	----	--	--	--	--

Comments:

**NASA/KSC SOLICITATION NNK12435778R
SECTION L/APPENDIX 4
PAST PERFORMANCE QUESTIONNAIRE**

**THIS COMPLETED QUESTIONNAIRE WILL NOT BE DISCLOSED TO ANYONE
OUTSIDE THE GOVERNMENT. THANK YOU FOR TAKING THE TIME TO COMPLETE
THIS QUESTIONNAIRE.**

NASA/KSC SOLICITATION NNK12435778R
SECTION L/APPENDIX 5
SMALL BUSINESS SUBCONTRACTING GOALS

This appendix shall be completed by all offerors, large and small, and submitted as part of the proposal. (Large Businesses may include this Appendix in their Small Business Subcontracting Plans.)

	<i>Column A</i>	<i>Column B</i>	<i>Column C</i>
Business Category	Goal as Percent of Contract Value	Dollar Value to be subcontracted per Category	Goal as Percent of Subcontracting Value
Small Business Concerns			
Large Business Concerns			
Total Dollars to be Subcontracted			
Subcategories of Small Business Concerns (Note: <i>The small business subcategories may not necessarily add up to the percentage and dollar amount in the “Small Business Concerns” category since some small businesses do not fall into any of the subcategories, while others will fall into more than one subcategory.</i>)			
Women Owned Small Business Concerns			
Small Disadvantaged Business Concerns			
Veteran Owned Small Business Concerns			
Service-Disabled Veteran-Owned Small Business Concerns			
HUBZone Small Business Concerns			
Historically Black Colleges and Universities/Minority Institutions			

Notes to Offerors:

It is recommended that Offerors first complete Column B by entering the dollar amount the Offeror proposes to subcontract to each business category and subcategory.

To complete Column A, divide the dollar amount in Column B by the **total offered price of the proposal** (that is, total contract value).

To complete column C, divide the corresponding amount in Column B by the amount in the “Total Dollars to be Subcontracted” cell in Column B. [Note: The “Total Dollars to be Subcontracted” amount in Column C will always be that category divided by itself (100 percent if any dollars are subcontracted).]

NASA/KSC SOLICITATION NNK12435778R
SECTION L/APPENDIX 5
SMALL BUSINESS SUBCONTRACTING GOALS

EXAMPLE OF A PROPERLY COMPLETED SMALL BUSINESS SUBCONTRACTING GOALS APPENDIX

Example of Subcontracting Goals, expressed in both contract value and subcontract value, for a contract proposed at \$100M with estimated subcontracts of \$50M:

	<i>Column A</i>	<i>Column B</i>	<i>Column C</i>
Business Category	Goal as Percent of Contract Value	Dollar Value to be subcontracted per Category	Goal as Percent of Subcontracting Value
Small Business Concerns	25 percent	\$25,000,000	50 percent
Large Business Concerns	n/a	\$25,000,000	50 percent
Total Dollars to be Subcontracted	n/a	\$50,000,000	100 percent
<i>The following small business subcategories do not necessarily add up to the percentage and dollar amount in the “Small Business Concerns” category above, since some small businesses do not fall into any of the subcategories below, while others will fall into more than one subcategory below.</i>			
Subcategories of Small Business Concerns			
Women Owned Small Business Concerns	9 percent	\$9,000,000	18 percent
Small Disadvantaged Business Concerns	5.5 percent	\$5,500,000	11 percent
Veteran Owned Small Business Concerns	2.5 percent	\$2,500,000	5 percent
Service-Disabled Veteran-Owned Small Business Concerns	1.5 percent	\$1,500,000	3 percent
HUBZone Small Business Concerns	1.5 percent	\$1,500,000	3 percent
Historically Black Colleges and Universities/Minority Institutions	1.5 percent	\$1,500,000	3 percent

To complete Column A, divide the dollar amount in Column B by the **total offered price of the proposal** (that is, total contract value). In the example above, Column A for Veteran Owned Business Concerns = \$2,500,000 divided by \$100,000,000, or 2.5 percent.

To complete column C, divide the corresponding amount in Column B by the amount in the “Total Dollars to be Subcontracted” cell in Column B. In the example above, Column C for Women-Owned Small Businesses = \$9,000,000 divided by \$50,000,000, or 18 percent.

Note: the “Total Dollars to be Subcontracted” amount in Column C will always be that category divided by itself (100percent if any dollars are subcontracted).

NASA/KSC SOLICITATION NNK12435778R
SECTION M – EVALUATION FACTORS FOR AWARD

M.1 BASIS FOR CONTRACT AWARD

a. EVALUATION FACTORS AND SELECTION OF THE SUCCESSFUL OFFEROR

The Contracting Officer will utilize a Lowest Price Technically Acceptable (LPTA) source selection process to make an award decision. Only one award will be made as a result of this solicitation. Award will be made to the offeror who is deemed responsible in accordance with the Federal Acquisition Regulation (FAR); and whose proposal, judged by an overall assessment of the evaluation criteria and other considerations specified in this solicitation, meets the technically acceptable standard for the non-price factors and provides the lowest evaluated price.

In accordance with the Instructions to Offerors – Competitive Acquisition provision of this solicitation (FAR 52.215-1), the Government intends to evaluate proposals and award a contract without discussions with offerors (except clarifications as described in FAR 15.306(a).) Therefore, the offeror's initial proposal should contain the offeror's best terms. The Government reserves the right to conduct discussions if the Contracting Officer later determines them to be necessary.

b. EVALUATION OF NON-PRICE FACTORS

Offerors will be evaluated on the non-price factors of Technical Experience, Past Performance, Safety and Occupational Health Plan, and Small Business Utilization.

(1) FACTOR 1 – TECHNICAL EXPERIENCE

Offerors must provide evidence that they have the technical experience needed to meet the technical performance requirements of this project. The Government will assess the technical experience of the offeror on projects identified in the offeror's Technical Experience Summary. Offerors must meet all of the following standards to receive an "Acceptable" rating on this factor:

At least three projects listed in the Technical Experience Summary must have been performed by the prime contractor or by major subcontractor(s), under NAICS code 238210 Electrical Contractors and Other Wiring Installation Contractors

All projects listed in the Technical Experience Summary must have been successfully completed within 5 years of the date of issuance of this solicitation NNK12435778R 5/25/2012.

All projects listed in the Technical Experience Summary must have been individually valued at or over \$350K.

At least three projects listed in the Technical Experience Summary must have involved

NASA/KSC SOLICITATION NNK12435778R
SECTION M – EVALUATION FACTORS FOR AWARD

preparing computer generated engineering shop drawings and as-built documentation including control panel assembly drawings, end-to-end wiring diagrams, network diagrams, control system diagrams, programmable logic controller (PLC) programs with comments and operations and maintenance (O&M) manuals.

At least one of the projects listed in the Technical Experience Summary must have involved selective demolition of existing control system components with selective re-utilization of existing equipment and wiring. It must also have included a phased control systems replacement in a pre-planned construction sequence.

At least one of the projects listed in the Technical Experience Summary must have involved fabricating custom PLC based control panels and performing factory acceptance testing (FAT) using input simulated to represent field conditions.

At least one of the projects listed in the Technical Experience Summary must have involved installing, calibrating and integrating control system components and sensors including resistance temperature detectors (RTDs), temperature sensors and transmitters, water flow meters, pressure sensors, valve actuators, I/P transducers and variable frequency drives (VFDs).

At least one of the projects listed in the Technical Experience Summary must have involved the development of custom and complex PLC programs and user interface graphics utilizing Citect Supervisor Control And Data Acquisition SCADA software that sequence on/off industrial equipment such as pumps, fans, VFDs, chillers, and cooling towers.

At least one of the projects listed in the Technical Experience Summary must have involved the installation and routing of conduits, connectors, control cabinets and junction boxes in conjunction with existing operational equipment. The project must also have involved connections to 480 volts alternating current (VAC) or higher motor control equipment.

At least one of the projects listed in the Technical Experience Summary must have involved, at a minimum, three distributed PLCs networked together via fiber and copper cabling, reporting back to a set of central servers and operator workstations running SCADA custom user interface application software with redundant fail over capabilities.

At least one of the projects listed in the Technical Experience Summary must have involved developing functional requirements and using them for fabricating, testing, installing and commissioning a distributed controls system networked back to a central control location.

The offeror's proposed staff must include an individual with documented technical training and experience programming Modicon Quantum PLCs using the Concept programming tool to program industrial control systems containing both digital and analog control

NASA/KSC SOLICITATION NNK12435778R
SECTION M – EVALUATION FACTORS FOR AWARD

variables.

The offeror's proposed staff must include an individual with documented technical training and experience using at least one of the following SCADA software application programs; Citect, Cimplicity, Wonderware or Proficy iFIX.

Failure to meet all of the requirements under this factor will result in an “UNACCEPTABLE” rating and elimination from further consideration for contract award.

(2) FACTOR 2 – PAST PERFORMANCE

Past performance information is one indicator of an offeror's ability to perform the contract successfully. The Government will assess the past performance of the offeror on the three projects identified in the offeror's Technical Experience Summary. (This assessment of past performance information is separate from the contractor responsibility determination required under FAR Subpart 9.1.)

The information provided in the Technical Experience Summary and the completed past performance questionnaires submitted by the offerors' Contracting Officers or customer contact equivalents identified in the Technical Experience Summary will be evaluated. The Government shall consider this information, as well as information obtained from other sources (to include interviews with previous customers), when evaluating each offeror's past performance. The currency and relevance of the information, source of the information, context of the data, and general trends in the offerors' past performance shall be considered. The evaluation shall take into account past performance information regarding predecessor companies, key personnel who have relevant experience, and/or subcontractors who will perform major or critical aspects of the requirement when such information is relevant to this acquisition. The Government will not disclose the names of persons/companies who provide performance information. If, during the course of the evaluation, the Government obtains adverse information to which the offeror has not previously had an opportunity to respond, the Government will afford the offeror an opportunity to clarify the adverse information.

(a) Past Performance Evaluation Areas. The government will evaluate the offeror's past performance in:

- (i) Providing prompt payment of employees, subcontractors, and suppliers for services and supplies performed/delivered under the contract.
- (ii) Complying with Davis-Bacon Act and other labor requirements and resolution of reported labor violations/discrepancies.
- (iii) Complying with contract subcontracting plan goals for small disadvantaged business concerns (see FAR 19.7), monetary targets for SDB participation(see

NASA/KSC SOLICITATION NNK12435778R
SECTION M – EVALUATION FACTORS FOR AWARD

FAR 19.1202), and notifications submitted under FAR 19.1202-4(b)
(Applicable only to offerors who are large businesses).

- (iv) Providing immediate and effective contractor management attention at the job site for resolution of contract problems.
- (v) Providing detailed and accurate computer generated engineering shop drawings and accurate and complete as-built documentation including control panel assembly drawings, end-to-end wiring diagrams, network diagrams, control system diagrams, PLC programs with comments, and O&M manuals.
- (vi) Working in an active controls environment and performing selective demolition of existing control system components and reutilization and replacement of selective control equipment and wiring with minimum control system down time and outages.
- (vii) Providing custom fabricated PLC based control panels that have passed factory acceptance testing ensuring the control system properly responds to expected field conditions.
- (viii) Installing, calibrating, and integrating control system components and sensors, including RTD temperature sensors and transmitters, water flow meters, pressure sensors, valve actuators, I/P transducers, and VFDs that accurately process and display the System's physical characteristics via operator interface.
- (ix) Developing custom and complex PLC programs and user interface graphics utilizing SCADA software for both automatic and manual sequencing of industrial equipment resulting in a seamless transfer of systems between manual and automatic modes.
- (x) Installing and routing conduits, connectors, control cabinets, junction boxes, and wiring from an operating controls system to a new controls system with 480 VAC and higher motor control equipment with no downtime.
- (xi) Providing a three distributed PLC control system networked together via fiber and copper cabling successfully reporting back to a set of central servers and operator workstations running SCADA custom user interface application software with redundant fail over capabilities.
- (xii) Developing control functional requirements to fabricate, test, install and commission a distributed industrial control system networked back to a central control location where operators can successfully monitor and control the entire system.

NASA/KSC SOLICITATION NNK12435778R
SECTION M – EVALUATION FACTORS FOR AWARD

- (xiii) Providing project completion within ten percent (10%) of original contract cost and schedule unless customer required changes caused a cost or schedule deviation greater than 10% as described in the project narrative in the Technical Experience Summary.
- (xiv) Maintaining an acceptable Safety Program:
 - i. Maintaining acceptable Days Away Restricted or Transferred (DART), Total Case Incident Rate (TCIR), OSHA 300 Log and Experience Modification Rating (EMR) rates for the previous three years
 - ii. Maintaining a safety and health program with visible management control and involvement
 - iii. Maintaining a safety program ensuring subcontractors' safety performances was consistent with the prime contractor's safety program
 - iv. Ability to analyze worksite hazards prior to the start of work to ensure that all hazards were abated
 - v. Maintaining a safety program with emergency procedures for securing dangerous conditions and protecting personnel during contract performance
 - vi. Ability to understand and comply with safety requirements
 - vii. Maintaining a safety program that ensured the customer's critical resources were adequately protected
 - viii. Ability to resolve safety discrepancies in a timely and effective manner
 - ix. Ability to report, investigate, and take corrective actions on safety accidents/incidents in a timely and effective manner

(b) Past Performance Confidence Ratings:

The Offeror's relevant experience and past performance will be reviewed and an assessment made that reflects the Government's judgment of the probability of each offeror successfully accomplishing the proposed effort based on that offeror's demonstrated performance. Past performance shall be evaluated for each offeror using the following levels of confidence ratings:

Very High Level of Confidence

NASA/KSC SOLICITATION NNK12435778R
SECTION M – EVALUATION FACTORS FOR AWARD

The Offeror's relevant past performance is of exceptional merit and is very highly pertinent to this acquisition; indicating exemplary performance in a timely, efficient, and economical manner; very minor (if any) problems with no adverse effect on overall performance. Based on the Offeror's performance record, there is a very high level of confidence that the Offeror will successfully perform the required effort.

High Level of Confidence

The Offeror's relevant past performance is highly pertinent to this acquisition; demonstrating very effective performance that would be fully responsive to contract requirements with contract requirements accomplished in a timely, efficient, and economical manner for the most part with only minor problems with little identifiable effect on overall performance. Based on the Offeror's performance record, there is a high level of confidence that the Offeror will successfully perform the required effort.

Moderate Level of Confidence

The Offeror's relevant past performance is pertinent to this acquisition, and it demonstrates effective performance; fully responsive to contract requirements; reportable problems, but with little identifiable effect on overall performance. Based on the Offeror's performance record, there is a moderate level of confidence that the Offeror will successfully perform the required effort.

Low Level of Confidence

The Offeror's relevant past performance is at least somewhat pertinent to this acquisition, and it meets or slightly exceeds minimum acceptable standards; adequate results; reportable problems with identifiable, but not substantial, effects on overall performance. Based on the Offeror's performance record, there is a low level of confidence that the Offeror will successfully perform the required effort. Changes to the Offeror's existing processes may be necessary in order to achieve contract requirements.

Very Low Level of Confidence

The Offeror's relevant past performance does not meet minimum acceptable standards in one or more areas; remedial action required in one or more areas; problems in one or more areas which, adversely affect overall performance. Based on the Offeror's performance record, there is a very low level of confidence that the Offeror will successfully perform the required effort.

NASA/KSC SOLICITATION NNK12435778R
SECTION M – EVALUATION FACTORS FOR AWARD

Neutral

In the case of an Offeror without a record of relevant past performance or for whom information on past performance is not available, the Offeror may not be evaluated favorably or unfavorably on past performance [see FAR 15.305(a) (2) (ii) and (iv)].

To receive an “Acceptable” rating for past performance, the offeror must receive an overall Past Performance Confidence Rating of Very High or High.

(3) FACTOR 3 – SAFETY AND OCCUPATIONAL HEALTH PLAN

The offeror’s Safety and Occupational Health Plan will be reviewed to determine:

- (a) The offeror’s understanding of and ability to comply with 29 CFR 1926 Safety & Health Regulations for Construction, NPR 8715.3 (NASA Safety Manual & Appendices), KNPR 8715.3 (KSC Safety Practices Procedural Requirements), 8715.7 (KSC Construction Contractor Safety & Health Practices Procedural Requirements)
- (b) The offeror’s ability to ensure the safety and occupational health of the project contractor employees (to include subcontractors) and to ensure safe working conditions throughout the performance of the contract.
- (c) The offeror’s ability to ensure the safety and occupational health of the public, astronauts and pilots, the NASA workforce (including Contractor employees working on NASA contracts) and the protection of the environment, high-valued equipment, and property.

To receive an “Acceptable” rating, the Safety and Occupational Health Plan must represent a reasonable initial effort to address the essential requirements of NFS 1852.223-73, Safety and Health Plan, demonstrates the offeror understands NASA’s safety requirements, and contains no major deficiencies or omissions which, if corrected, would require a major rewrite of the Plan.

Failure to meet all of the requirements under this factor will result in an “UNACCEPTABLE” rating and elimination from further consideration for contract award.

(1) FACTOR 4 - SMALL BUSINESS UTILIZATION

The evaluation of Small Business Subcontracting and Commitment to the Small Business Program applies to all Offerors, except that Small Businesses are not required to submit a Small Business Subcontracting Plan.

NASA/KSC SOLICITATION NNK12435778R
SECTION M – EVALUATION FACTORS FOR AWARD

(a) Small Business Subcontracting

- (1) Large Business Concerns: Large businesses are required to submit subcontracting plans, to include Section L, Appendix 5, Small Business Subcontracting Plan Goals. The offeror's Small Business Subcontracting Plan will be evaluated in terms of meeting the requirements of FAR 19.704, Subcontracting Plan Requirements. The Small Business Subcontracting goals will be evaluated in terms of the offeror's proposed subcontracting goals (overall subcontracting goals and individual subcontracting goals by small business category) in comparison to the Contracting Officer's assessment of the appropriate subcontracting goals for this procurement. The evaluation of the Small Business Subcontracting Plan will be on the basis of total contract value.
- (ii) Small Business Concerns: Small businesses are not required to submit subcontracting plans but are required to submit Section L, Appendix 5, Small Business Subcontracting Goals. NASA will only evaluate the amount of work proposed to be performed by the small business prime and any small business at the first tier subcontract level. The proposed amount of work to be done by the prime small business and first tier small business subcontractors will be evaluated against the Contracting Officer's assessment of the overall subcontracting goal for this procurement. Individual subcontracting goals by small business categories will not be evaluated for small business primes and their first tier subcontractors.

(b) Commitment to Small Businesses

- (1) NASA will evaluate the extent to which any work performed by a small business subcontractor(s) is identified as "high technology." NASA also will evaluate the extent of commitment to use the subcontractor(s) enforceable vs. non-enforceable commitments.
- (2) NASA will evaluate the extent to which the identity of the small business subcontractor is specified in the proposal as well as the extent of the commitment to use small businesses. (For small business offerors, NASA will evaluate this only if subcontracting opportunities exist.)
- (3) NASA will evaluate the Offeror's established or planned procedures and organizational structure for small business outreach, assistance, participation in the Mentor Protégé program, counseling, market research and small business identification, and relevant purchasing procedures. (For large businesses Offerors, this information should conform to its submitted Small Business Subcontracting Plan. For small business Offerors, NASA

NASA/KSC SOLICITATION NNK12435778R
SECTION M – EVALUATION FACTORS FOR AWARD

will evaluate this only if subcontracting opportunities exist.)

Offerors must meet all of the following standards to receive an “Acceptable” rating on this factor:

- The large businesses’ Small Business Subcontracting Plan addresses all of the eleven (11) requirements of FAR Clause 52.219-9, Small Business Subcontracting Plan, paragraphs (d)(1) thru (11). (Applicable to Large Businesses Only)
- The large and small businesses’ proposed Small Business Subcontracting Goals meet or exceed the Contracting Officer’s assessment of the appropriate subcontracting goals for this procurement. (NOTE: NASA will consider the amount of work being retained for performance by the prime contractor in-house when determining whether subcontracting goals meet or exceed.)(Applicable to Large Businesses and Small Businesses)
- The large and small businesses’ proposal demonstrates Small Business subcontractor commitments. (NOTE: For Small Business, NASA will evaluate this only if subcontracting opportunities exist.) (Applicable to Large and Small Businesses)

c. EVALUATION OF PRICE PROPOSALS

The proposed prices will be evaluated by comparison against the Government estimate and prices submitted by other offerors. Prices that are determined to be more than 25% above or below the Independent Government Estimate or more than 25% above or below the mean price proposed by all offerors will be considered to be unreasonably high or unrealistically low and will not be considered for award. As part of this process the Government will establish a proposal price ranking of the percentage differences from both the IGE and mean price of all offers submitted for that particular category, from lowest to highest.

FAR 52.217-4, Evaluation of Options Exercised at Time of Contract Award (JUN 1988), applies to this solicitation. The Government will evaluate the total price for the basic requirement together with any option(s) exercised at the time of award.

EVALUATION PROCESS

The following describes the general methodology that will be used for proposal evaluation:

(1) General Review:

Offerors will be checked against the List of Parties Excluded From Federal Procurement and Non-procurement Programs. Offerors who appear on the List will be eliminated without further consideration. Proposals will also be checked for minor informalities or irregularities. The Contracting Officer will follow guidance at FAR 15.306 for resolving

NASA/KSC SOLICITATION NNK12435778R
SECTION M – EVALUATION FACTORS FOR AWARD

minor informalities or irregularities.

- (2) The Contracting Officer will conduct a price analysis on each offeror's submitted price.
- (3) The technical (non-price) volume of the offeror with the lowest evaluated reasonable price will be given to the technical evaluators for review. If the technical proposal is determined to be technically "Acceptable", award shall be made to that offeror, subject to a positive responsibility determination in accordance with FAR Part 9. In order for a technical proposal to be determined technically "Acceptable", all of the non-price factors in the technical proposal must be individually and collectively evaluated as "Acceptable".
- (4) If the technical proposal is determined to be technically "Unacceptable" the technical (non-price) volume of the offeror with the next lowest evaluated reasonable price will be given to the technical evaluators for review. If the technical proposal of the offeror with the next lowest evaluated reasonable price is determined to be technically "Acceptable" award shall be made to that offeror subject to a positive responsibility determination in accordance with FAR Part 9.
- (5) If the technical proposal is determined to be technically "Unacceptable" the process described will be conducted again, as many times as necessary, until such time as the Government identifies a technically "Acceptable" proposal.

M.2 SOURCE SELECTION DECISION

Selection for contract award will be made based on a Lowest Price Technically Acceptable (LPTA) source selection process. The proposal that provides the lowest price that is not more than 25% above or below the Independent Government Estimate or more than 25% above or below the mean price proposed by all offerors and is otherwise technically acceptable in all non-price factors will be selected for award. The selection will be made subject to an affirmative determination of contractor responsibility in accordance with FAR Subpart 9.1.

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-A - PROJECT DELIVERABLES

PROJECT DELIVERABLES

Incidental deliverables (manuals, reports, plans, and other written documentation) to be provided under this contract are identified in this Attachment J-A. Nothing contained in this Attachment J-A shall relieve the Contractor from furnishing data called for by, or under the authority of, other provisions of this contract which are not identified and described in this Attachment J-A. The costs for data to be furnished in response to Attachment J-A is included in the firm-fixed price of this contract.

J-A-1 SUBMITTAL SCHEDULES

- (a) Within 15 days of Notice to Proceed, the Contractor shall provide, for approval by the Contracting Officer, the following schedules of submittals:
 - (1) A schedule of all shop drawings and technical submittals required by the specifications and drawings. The schedule will indicate the specification or drawing reference requiring the submittal; the material, item or process for which the submittal is required; the "SD" number and identifying title of the submittal; the Contractor's anticipated submission date and the approval need date.
 - (2) A separate schedule of all other submittals required under the contract but not listed in the specifications or drawings. The schedule will indicate the contract requirement reference; the type or title of the submittal; the Contractor's anticipated submission date and the approval need date (if approval is required).
- (b) All submittals called for by the contract documents will be listed on one of the above schedules. If a submittal is called for but does not pertain to the contract work, the Contractor will include it in the applicable schedule and annotate it "N/A" with a brief explanation. Approval of the schedules by the Contracting Officer does not relieve the Contractor of supplying submittals required by the contract documents but which have been omitted from the schedules or marked "N/A".
- (c) Copies of both schedules will be re-submitted monthly annotated by the Contractor with actual submission and approval dates. When all items on a schedule have been finally approved, no further re-submittal of the schedule is required.

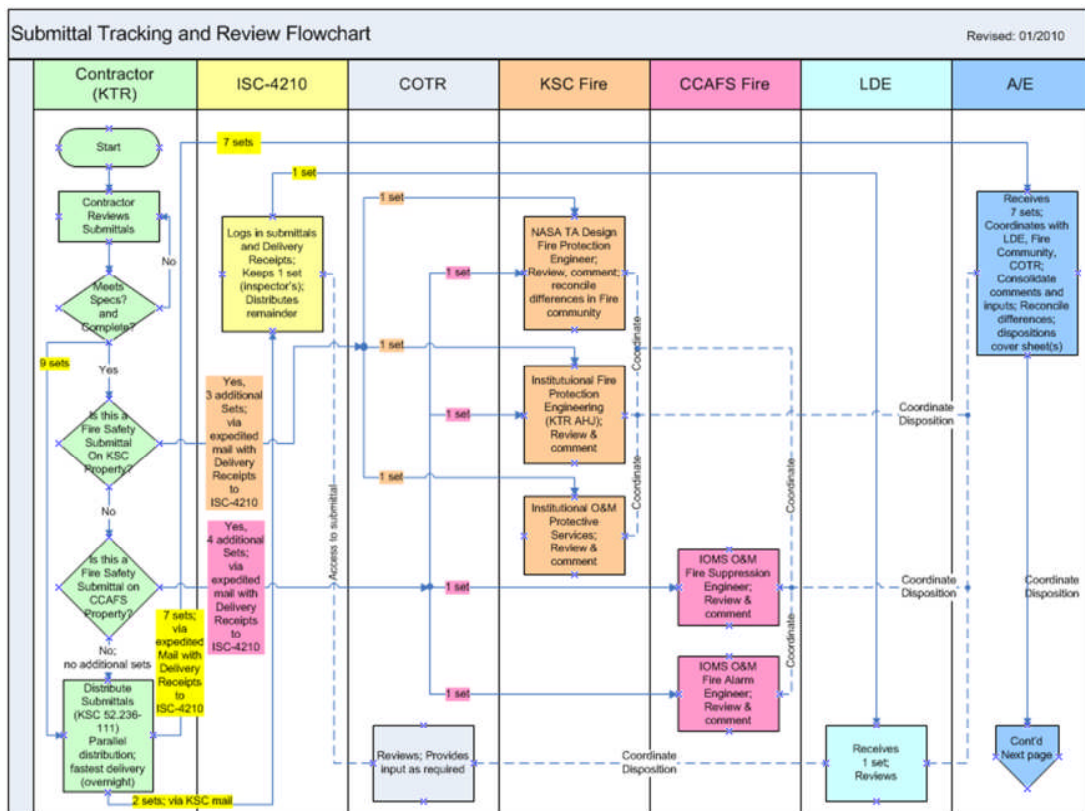
J-A-2 SHOP DRAWINGS

Pursuant to FAR clause 52.236-21 entitled "Specifications and Drawings for Construction"; the Contractor shall submit Shop Drawings as detailed below. For purposes of this clause, the term "Shop Drawings" shall be construed to include all "Submittal Descriptions" (Type SD-01, SD-02, SD-03, etc., as required by project technical specifications) that are necessary to fully describe contractor supplied materials and installation methods and demonstrate their compliance with the technical and performance requirements of the contract. Submittal

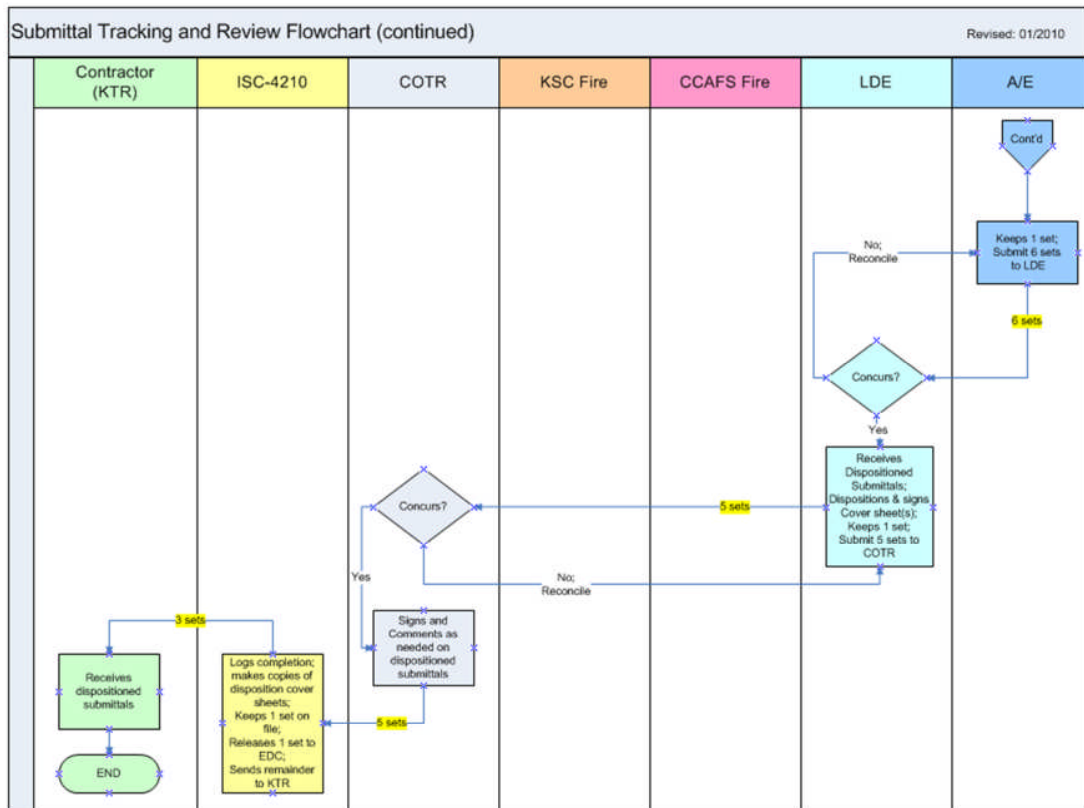
NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-A - PROJECT DELIVERABLES

Descriptions include drawings, design data, catalog cuts, descriptive literature, illustrations, schedules, performance and test data, and similar materials to be furnished by the contractor. The preparation and distribution requirements described herein apply to all such SD submittals except as noted in technical specifications or otherwise directed by the Contracting Officer.

- (a) For Shop Drawing submittals provide complete sets to KSC functional organizations and to the Architect/Engineer as shown on the “Submittal Tracking and Review Flowchart.” Names, mail codes and addresses will be provided at the Pre-work Conference.
- (b) The Shop Drawing submittals shall be transmitted to the Contracting Officer and the A/E on the same day. Delivery to the A/E and other KSC functional organizations shall be by the equivalent of “next day” delivery service with delivery receipts or other proof of delivery that show traceability to the delivery destination and receipt of the delivery. The timestamp recorded by the Contracting Officer upon receipt from the Contractor shall be the record date. Delivery receipts and other proof of delivery shall be submitted to the Contracting officer or delegated organization as shown on the “Submittal Tracking and Review Flowchart” provided below:



NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-A - PROJECT DELIVERABLES



- (d) Three (3) sets shop drawings will be returned to the Contractor. These sets will be returned to the Contractor within (See Below) calendar days of the record date with appropriate review and approval notations as described below:

21 calendar days turnaround

28 calendar days turnaround for Software and Control System Wiring Diagrams

On or before completion date of the contract, the Contractor shall submit to the Contracting Officer two complete sets of shop drawings, which incorporate all comments, annotations, conditions of approval and corrections. Both drawing sets are to be made from the same original

- (e) The shop drawings shall be complete and detailed and shall contain all information required for checking without reference to material contained in other shop drawing transmittals. Partial submittals will not be accepted unless specifically approved by the Contracting Officer. Any partial submittals shall be so indicated and any outstanding submittal required to complete the package shall be identified.
- (f) Shop drawings shall be submitted in a logical sequence that is duly coordinated with long lead-time procurements and with fabrication and construction schedules. Each set of shop drawings shall be accompanied by a completed KSC shop drawing submittal

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-A - PROJECT DELIVERABLES

form listing the specification or drawing reference requiring the shop drawing; the material, item or process for which the shop drawing is required and the "SD" number and identifying title of the shop drawing. The Shop Drawing form will be supplied by the Government.

- (g) Shop drawings for certain systems (e.g. fire detection/suppression) must be submitted as soon as 30 days following contractor's Notice to Proceed, and associated as built drawings, software, programs and test procedures must be submitted up to 30 days prior to acceptance testing. See Shop Drawing and submittal references in project technical specifications for affected submittals and their respective deadlines.
- (h) "Drawings" as opposed to "Shop Drawings" shall mean actual drawings, diagrams, layouts and schematics. "Drawings" fall under the more general term "Shop Drawings" which include other required materials.
 - (1) Drawings shall be uniform in size, nominally 24 by 36 inches, with a maximum size of 28 by 40 inches. All drawings shall have dark lines on a white background.
 - (2) Drawings shall be numbered in logical sequence. The Contractor may use his own numbering system. Each drawing shall bear the number of the submittal (e.g. First Submittal, Second Submittal, etc.) in a uniform location adjacent to the title block. The NASA contract number shall appear in the margin, immediately below the title block, for each drawing.
 - (3) A blank space, no smaller than 4 by 5 inches shall be reserved on the right hand half of each sheet for the Government disposition stamp.
- (i) Review and approval notation will be as follows:
 - (1) Shop drawings marked "approved" authorize the Contractor to proceed with work covered by such drawings.
 - (2) Shop drawings marked "approved as noted" authorize the Contractor to proceed with the work covered provided he takes no exception to the corrections. The notes shall be incorporated on the shop drawings prior to submission of the final shop drawings.
 - (3) Shop drawings marked "returned for correction" require the Contractor to make the necessary corrections and revisions on the drawings and re-submit them for approval in the same routine as before, prior to proceedings with any of the work depicted on the drawings.
 - (4) Shop drawings marked "not approved" or "disapproved" indicate noncompliance with the contract requirements and the shop drawings shall be re-submitted with appropriate changes. No item of work requiring a shop drawing shall be

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-A - PROJECT DELIVERABLES

accomplished until the drawings are approved or approved as noted.

- (5) The Contractor shall make any corrections required by the Contracting Officer. If the Contractor considers any correction or notation indicated on the returned shop drawings to constitute a change to the contract drawings or specifications; notice as required under the clause entitled "Changes" shall be given to the Contracting Officer.
- (6) The Government's engineering review of Contractor's shop drawing submittal(s) is for general conformance with the design concept of the project and the information given in the contract documents. As such, approval of the shop drawings by the Contracting Officer shall not be construed as a complete check, but will indicate only that the general method of construction and detailing is satisfactory. The Contractor is solely responsible for the dimensions and design of adequate connection details; confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating the work with that of other trades and performing the work in a safe and satisfactory manner, and certifying that proposed products meet all technical specifications and all contractual provisions, especially those relating to the 'Buy American Act'. Corrections or comments made as part of the Government review do not relieve the Contractor from compliance with the requirements of the contract documents. Likewise, any approval of a Shop Drawing Submittal containing an unidentified deviation from the technical requirements of the applicable contract drawings, maps and specifications, shall not relieve the contractor from compliance with the technical requirements.
- (j) If changes are necessary to approved shop drawings whether as a result of a contract change or for any other reasons, the Contractor shall make such revisions and resubmit the shop drawings in accordance with the procedures in paragraphs a. through c. above. No item of work requiring a shop drawings change shall be accomplished until the changed shop drawings are approved.
- (k) Progress payments will not be made on materials and equipment that have been delivered to the job site but not approved on shop drawings.

J-A-3 RECORD DRAWINGS

- (a) After completion of all construction and before final payment is made, the Contractor shall submit one complete set of full size blue line contract drawings with fully dimensioned changes shown in red pencil to the Contracting Officer.
- (b) The Contractor shall verify all dimensions and Geographical Information System (GIS) data shown on the contract drawings. Civil discipline systems, such as site dimensions and elevations, underground utilities, manholes, access points, paving, etc. and systems

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-A - PROJECT DELIVERABLES

requiring state certifications, such as stormwater systems, shall require verification by a registered land surveyor. As-built dimensions and GIS data shall be at the same level of detail as the contract drawings.

- (c) All dimensional changes shall be reflected as corrected dimensions by striking through the dimension value with a single line and circling this change. A leader shall point from the actual, as-built dimension to the circled change. All utility routing and interface changes shall be reflected on the drawings to scale and defined with sufficient dimensions to be able to locate. Indicating by reference alone, for example to a change order number, will not be acceptable.
- (d) These record drawings shall be maintained by the Contractor at the work site and shall be updated based on job progress to reflect all changes and deviations and actual routing of all field-routed utilities and services. All lines, letters, and details shall be sharp, clear, and fully legible. All additions to the drawings shall be precisely drawn to scale of the original drawing and their locations shall be dimensioned.

(e) Final Systems Drawings for Wiring/Devices/Control Systems:

- (1) Final system drawings for wiring and control systems shall be prepared and submitted as described below, and in accordance with additional requirements as described in technical specifications.
- (2) Record drawings shall be made available for Government review on a monthly basis at the job site. This monthly review of record drawings will be part of the monthly monetary progress review.
- (3) Drawings for installation of wiring, devices and/or controls that require field routing must be red-lined, reproduced, verified for accuracy, and submitted for approval per the requirements set forth under the section entitled Shop Drawings herein a minimum of two weeks before requesting a final walkdown of the following systems. These drawings shall be labeled "FINAL SHOP DRAWINGS". In addition to hardcopy reproductions, the final drawings submittals shall include electronic files in Intergraph or Microstation format or in a Computer Aided Design (CAD) format compatible with Intergraph or Microstation.
- (4) Final Systems Drawings are required for:
 - (i) HVAC
 - (ii) Paging/Area Warning
 - (iii) Premise Wiring

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-A - PROJECT DELIVERABLES

- (iv) Electrical control schematics and connection diagrams
- (v) Elevators
- (vi) Fire detection/suppression systems
- (vii) Any other system involving wiring and controls, with the exception of facility lighting

(f) Sewer System Certification:

For all work involving sewer system installations or modifications, the Contractor shall provide to the Contracting Officer three (3) sets of drawings in the form of an As-Built Survey signed and sealed by a State of Florida Registered Land Surveyor for the sewer system. The as-built survey shall show all locations and invert elevations of the sewer system to verify that its placement is per contract drawings. The submittal shall be complete and sufficient for the Engineer's of Record certification to the Florida Department of Environmental Protection. The as-built survey level of detail shall be the same as shown in the contract drawings. If significant differences exist between the contract requirements and as-built conditions as evidenced by the survey, the differences shall be corrected and a new as-built survey made and submitted as before. Drawings shall be provided prior to the final inspection.

- (g) Record drawings shall be made available for Government review on a monthly basis at the job site. This monthly review of record drawings will be part of the monthly monetary progress review.

J-A-4 PROGRESS SCHEDULES

Pursuant to FAR 52.236-15, entitled "Schedules for Construction Contracts," the Contractor shall:

- (a) Prepare the Progress Schedule using standard commercially available scheduling software or comparable format such as a bar chart approved by the Contracting Officer.
- (b) Submit the Progress Schedule, for approval by the Contracting Officer, at the Pre-Work Conference in four (4) copies. Include a copy of the electronic file if Progress Schedule is prepared using scheduling software. The approved initial progress schedule will be the baseline schedule for the project.
- (c) Include no less than the following information on the Progress Schedule:
 - (1) Major headings for primary project scope broken out in accordance with the Divisions and/or Sections of the project specifications.

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-A - PROJECT DELIVERABLES

- (2) Line item break-downs under each major heading sufficient to track the progress of the work.
- (3) A line item showing contract finalization tasks which includes Punch List, Clean-up and Demobilization, and Final Construction Drawings.
- (4) Appropriate level of detail under each line item or activity (compatible with the schedule of values) sufficient to track the cost and schedule performance, including scheduled vs. actual percentage complete for any given day within the contract performance period. (Progress schedules prepared using scheduling software shall include resource loaded activities [labor, material, and other resources), major deliveries, project milestones, etc.]. Bar Charts shall include, as a minimum, a materials bar and a separate labor bar for each line item.) Each element shall include the estimated cost and percentage weight of total contract cost. The labor element shall also show the number of workers expected to be working on any given date within the Contract Performance Period.
- (5) For projects involving the installation or modification of Fire Alarm systems, include at a minimum the following line items on the schedule of values:
 - a. Fire Alarm Rough-In Material
 - b. Fire Alarm Rough-In Labor
 - c. Fire Alarm Trim Material
 - d. Fire Alarm Trim Labor
 - e. Fire Alarm Preliminary Testing
 - f. Fire Alarm Final Testing
- (6) For projects involving the installation or modification of Building Controls (i.e. HVAC, Lighting, etc...) systems, include at a minimum the following line items on the schedule of values:
 - a. Controls Rough-In Material
 - b. Controls Rough-In Labor
 - c. Controls Trim Material
 - d. Controls Trim Labor
 - e. Controls Testing

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-A - PROJECT DELIVERABLES

- (7) Separate line items for Mobilization and Shop Drawing submittal and approval (these items are to show no associated costs).
- (8) The progress schedule or bar chart shall indicate the file date and status date (data date).
- (d) Update the progress schedule every 30 calendar days throughout the contract performance period. All work that has not been completed in accordance with the previously approved schedule shall be rescheduled to reflect actual or planned progress based on the current status date. Submit four copies (and electronic file as applicable) to the Contracting Officer for approval. Progress schedule updates shall be submitted concurrently with progress payment requests.

J-A-5 SCHEDULING

The Contractor will be required to provide detailed scheduling information regarding planned operations to the Contracting Officer's designated representative for input to the KSC Industrial Area 72 hour/11-day operations schedule (a total of 14 days). This schedule input must be provided on a daily basis prior to 1:00 P.M. The schedule must show the Contractor's planned operations in detail for the next 3 days in hourly increments and in shift increments for the following 11 days.

All Contractor operations requiring support from KSC, such as outages or fire and safety standby, for hazardous operations, shall be identified.

J-A-6 NFS 1852.223-73 SAFETY AND HEALTH PLAN (NOV 2004) (MODIFIED)

The contractor, upon request by the Contracting Officer, shall submit a detailed site specific safety and occupational health plan in accordance with NPR 8715.3, NASA General Safety Program Requirements, Appendices and KNPR 8715.7 KSC Construction Contractor Safety and Health Practices Procedural Requirements. KSC-UG-2814, KSC Construction Contractor's Safety and Health Practices Users Guide has a template the contractor should follow when preparing the site specific Safety and Health Plan **Notice to Proceed with on-site work will be withheld pending approval of the site specific Safety and Health Plan.**

The plan shall include detailed policies, procedures, and techniques that will be used to ensure the safety and occupational health of Contractor employees and to ensure safe working conditions throughout the performance of the contract.

The plan shall address the policies, procedures, and techniques that will be used to ensure the safety and occupational health of the public, astronauts and pilots, the NASA workforce, safety and occupational health of the public, astronauts and pilots, the NASA workforce (including Contractor employees working on NASA contracts) and high-valued equipment and property.

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-A - PROJECT DELIVERABLES

The plan shall take into account all work to be performed on the awarded contract. This plan shall address how the Contractor intends to comply with 29 CFR 1926 Safety and Health Regulations for Construction, applicable sections 29 CFR 1910 Safety and Health Regulations for General Industry, applicable national consensus standards, NASA and KSC Safety and Health Regulations and requirements with regard to all safety and health issues that will be encountered on this project.

The plan shall similarly address subcontractor employee safety and occupational health for those subcontractors who will be performing work under the contract when one or more of the following conditions apply: (Note: Contractors may not delegate overall site safety responsibility or authority for any personnel working under the provisions of this section to any subcontractor).

- (1) The work will be conducted completely or partly on premises owned or controlled by the government.
- (2) The work includes construction, alteration, or repair of facilities in excess of the simplified acquisition threshold.
- (3) The work, regardless of place of performance, involves hazards that could endanger the public, astronauts and pilots, the NASA workforce (including Contractor employees working on NASA contracts), or high value equipment or property, and the hazards are not adequately addressed by Occupational Safety and Health Administration (OSHA) or Department of Transportation (DOT) regulations (if applicable).
- (4) When the assessed risk and consequences of a failure to properly manage and control the hazards warrants use of the clause.

The contractor shall submit a copy of their Log of Occupational Injuries and Illnesses that includes an annual summary of occupational injuries and illnesses (or equivalent) as described in Title 29, Code of Federal Regulations, Subpart 1904.5. If the Contractor is exempt by regulation from maintaining and publishing such logs, equivalent data in contractor's format is acceptable (such as loss runs from insurance carrier) which contains the data required. Data shall be compiled and reported by calendar year and the most recent summary shall be provided at the same time as the site specific safety and health plan.

The contractor shall also submit documentation containing the company's Experience Modification Rate (EMR), Days Away, Restricted or Transferred rate (DART), and Total Case Incident Rate for injury and illnesses (TCIR) for the past 3 years.

This site specific safety and health plan, as approved by the Contracting Officer, will be incorporated into the contract.

(End of clause)

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-A - PROJECT DELIVERABLES

J-A-7 TOXIC METALS SAFETY AND HEALTH PLAN

The use of paints containing heavy metals and polychlorinated biphenyls (PCB) has been commonplace at the Kennedy Space Center. The Contractor shall assume that all existing painted surfaces encountered in the performance of work contain heavy metals and PCB when developing the Toxic Metals Safety and Health Plan and performing work. The Contractor may, at his discretion, test any painted surfaces, in accordance with appropriate regulatory standards, to determine the absence of heavy metals and PCB in the paint.

In addition to and separate from the Safety and Health Plan required under this solicitation/contract, the Contractor shall submit a detailed Toxic Metals Safety and Health Plan. The Toxic Metals Safety and Health Plan shall disclose how the Contractor intends to protect NASA and contractor employees as well as the environment from toxic metals during the ongoing activities of this contract. The contractor shall submit a minimum of five (5) copies of the Toxic Metals Safety and Health Plan for review and approval by the Contracting Officer. The Contracting Officer will forward one copy each to TA-B1 for review.

The Toxic Metals Safety and Health Plan shall provide a description of the Contractor's approach to contain and control dusts, fumes and other airborne or waterborne emissions from the work site for the protection of other personnel at the work location and the environment. This part of the plan shall also discuss monitoring activities during the work in progress to assure the effectiveness of the Contractor's emission control measures.

The Toxic Metals Safety and Health Plan shall also provide written policies, plans, and procedures detailing how the contractor intends to comply with the Occupational Safety and Health Administration (OSHA) Construction Industry Standards (29 CFR 1926) and applicable General Industry Standards (29 CFR 1910). As a minimum, the Toxic Metals Safety and Health Plan shall address how compliance with the following regulations will be achieved:

19 CFR, Part 1926, Safety and Health Regulations for Construction,
Subpart D, Occupational Safety & Health Environmental Controls

1926.55, Gases, Vapors, Fumes, Mists, and Dusts

1926.59, Hazard Communication

1926.62, Lead

1926.1127, Cadmium, Subpart E, Personal Protective and Life Saving Equipment

1926.103, Respiratory Protection

1926.353, Ventilation and Protection in welding cutting, and heating

1926.154, Welding, cutting, and heating in way of preservative coatings.

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-A - PROJECT DELIVERABLES

KHB 1840.1 (Latest Edition), KSC Industrial Hygiene Handbook, as applicable

KHB 1820.4 (Latest Edition), KSC Respiratory Protection Program, as applicable

The regulations require strict contractor adherence but are not limited to items such as employee training, respiratory protection, protective clothing and equipment, employee medical surveillance, hygiene facilities, warning signs, record keeping, air monitoring, and housekeeping.

J-A-8 LIFTING PLAN AND RIGGING PLAN

A detailed Lifting and Rigging Plan shall be submitted by the Contractor 14 days prior to lifting operations. Lifting operations include work performed within KSC Industrial Area that requires the use of cranes or lifting equipment to include chokers, slings, and shackles used to move material, personnel, and equipment to/from heights in excess of 25 feet. One lifting and rigging plan may be submitted for multiple lifts using the same equipment by utilizing the most stringent applicable conditions. Four (4) copies of a detailed Lifting and Rigging Plan shall be submitted for approval to the Contracting Office using KSC Form 50-101V2NS provided as attachment J-J. The lifting plan shall address:

1. The specific crane(s) lifting and rigging equipment that will be on site
2. The maximum swing radius to be used and the degrees in relation to the crane, such as 360 degrees over the counterweight, etc.
3. A sketch of where the crane will be located in relation to where the loads will be situated
4. The estimated maximum load weights
5. The type and weight of rigging to be used and how it will be configured
6. A copy of the crane capacity chart to be used
7. A copy of all crane deductions
8. Maximum crane boom to be used
9. Counterweight configurations
10. Certifications of the crane, operator, and rigging
11. Certifications of rigging personnel

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-A - PROJECT DELIVERABLES

12. General narrative description of lift operations, plan of approach, and safety measures to be implemented during the lifting operations

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-B – KSC PROJECT SPECIFIC REQUIREMENTS

**KENNEDY SPACE CENTER PROJECT SPECIFIC REQUIREMENTS APPLICABLE TO ALL
WORK PERFORMED UNDER THIS CONTRACT**

The Kennedy Space Center project specific requirements supporting Contract Section I are identified in this Attachment J-B. Nothing contained in this Attachment J-B shall relieve the Contractor from complying with other requirements of this contract, which are not identified and described in this Attachment J-B. All costs associated with the requirements of this Attachment J-B are included in the firm-fixed price of this contract.

**J-B-1 UTILITY OUTAGE, ENERGIZED ELECTRICAL WORK, ELECTRICAL
HAZARD ANALYSIS, AND EXCAVATION PERMITS**

(a) Utility Outage Requests and Electrical Work Permits

- (1) Utility Outage Requests: All outages required during the prosecution of work which affects utility systems, such as electrical, water, fire detection and protection systems and air handling systems will require permits. Work shall be scheduled to hold outages to a minimum. Request for utility outage permits shall be made in writing to the Contracting Officer at least fourteen (14) working days in advance of the time required. The request shall state the system involved, area involved, approximate time of outage, and the nature of the work involved. The fact that the Contractor requests an outage for a specific time period does not necessarily mean that the outage will take place. Due to the nature of the operations at Kennedy Space Center, the Contractor probably will not know until the day before the requested date if the outage will take place as scheduled. All outages will take place outside regular working hours. The Contractor will not be entitled to additional payment for working irregular hours due to outages.
- (2) Electrical Work Permits: Prior to beginning work on an electrical system under an approved outage, the Contractor shall obtain an executed Work Permit (form number KSC-26-400NS) from the Base Support contractor, and then execute complex lockout/tag-out procedures for all Work Permit related work as follows:
 - a. The Contractor's employee in charge of the required lockout/tag-out shall be present at the time the Government switches high-, medium-, or low-voltage circuits under Government access control which are to be locked and tagged out by the Contractor. The Contractor shall coordinate with the COTR for the required switching period time and date. Due to KSC operational considerations the switching period time and date may be at any time, and outside of normal working hours or work days.
 - b. Once Government switching is complete the Contractor's employee in charge of the lockout/tag-out shall sign the Work Permit and immediately install the required OSHA compliant lockout / tag-out on the required switching device(s). Once installed the Contractor's employee in charge of the lockout/tag-out shall individually note the locations of the locks and tags on the Work Permit form.

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-B – KSC PROJECT SPECIFIC REQUIREMENTS

- c. A lockout/tag-out lock box shall be used for all such lockout / tag-outs. The key(s) from the lock(s) installed by the Contractor's employee in charge of the lockout/tag-out shall be placed in the box and the employee in charge shall place an additional personal lock on the lock box to secure the keys inside. Lock box shall be kept at the work site and all other Contractor employees shall attach their personal lockout/tag-out on this box at any time they are working on the applicable equipment.
- d. At the start of the first standard work period following the lockout/tag-out of a Government switched circuit for which a Work Permit is issued, the Contractor's employee in charge of the lockout/tag-out shall complete the required lockout/tag-out (lock box) procedures. Immediately upon completing the lockout/tag-out the Contractor shall verify no voltage is present on all circuit conductors using suitable testing equipment, safe work practices, and all required personal protective equipment. All other circuit safeguards such as grounding shall occur immediately after the voltage test and each safeguard shall be individually recorded on the Work Permit.

(b) Energized Electrical Work and Hazard Analysis

- (1) Live parts to which an employee might be exposed shall be put into an electrically safe work condition before an employee works on or near them, unless the employer can demonstrate that de-energizing introduces additional or increased hazards or is infeasible due to equipment design or operational limitations. If live parts are not placed in an electrically safe work condition (i.e., due to increased or additional hazards or infeasibility), work to be performed shall be considered energized electrical work. Safety plans, job hazard analysis, and work practices for work on or in proximity to energized parts shall be in accordance with KNPR 8715.7, KSC Construction Contractor Safety and Health Practices Procedural Requirements.

(2) Electrical Hazard Analysis:

Arc-flash and shock prevention personal protective equipment (PPE) is required for all energized electrical work and where energized or exposed live parts may not be present, but a potential hazard exists including: manhole or cable vault/tray insulated cable inspections, circuit breaker or switch operation, and de-energized voltage checks to electrically safe equipment.

The Contractor shall provide a qualified electrical safety professional to perform an arc-flash and shock hazard analysis in accordance with NFPA 70E for all such electrical work. The analysis shall be submitted with the Contractor's Site Specific Safety Plan (SSSP) and referenced in any applicable Job Hazard Analysis (JHA). The safety professional shall perform and review a power system analysis using computer software specifically designed for the purpose to determine short circuit levels and arc flash hazard incident energy at all locations to be worked on by the Contractor. Table 130.7(C)(9) in NFPA 70E may be used in lieu of calculations when all applicable general notes for the table apply. The Government will provide source short circuit levels and clearing times for

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-B – KSC PROJECT SPECIFIC REQUIREMENTS

Government operated electrical source equipment as well as any applicable design information. The analysis shall include a table summarizing the results of the analysis with the following information for each location or piece of equipment:

- i. Protective Device Name
- ii. Protective Device Clearing Time
- iii. Maximum Voltage
- iv. Calculated Bolted Three Phase Fault Level
- v. Calculated Bolted Ground Fault Level
- vi. Calculated Minimum Arcing Fault Level
- vii. Arc-Distance if applicable for the calculation
- viii. Employee Working Distance
- ix. Calculated Arc-Flash Boundary
- x. Calculated Maximum Arc-Flash Incident Energy
- xi. Arc-Flash PPE Category
- xii. Shock Prevention PPE Insulating Class
- xiii. Limited Approach Boundary
- xiv. Restricted Approach Boundary
- xv. Prohibited Approach Boundary

- (3) Electrical Manhole / Vault Confined Space Requirements: Reference KNPR 8715.7, KSC Construction Contractor Safety and Health Practices Procedural Requirements. During the site specific safety plan submittal phase, the Contractor shall complete a hazard evaluation of confined space(s) ensuring all hazards associated with the space or that may be introduced to the space have been identified and mitigated. The Contractor's designated safety professional shall coordinate with the COTR to complete a confined space hazard assessment (KSC Form 28-750NS) in accordance with KNPR 1840.19 for each confined space, and to schedule a job-site inspection meeting with KSC Environmental Health and Safety personnel. Within 35 calendar days after this meeting the COTR will provide a confined space hazard assessment to the Contractor. This assessment must be complete

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-B – KSC PROJECT SPECIFIC REQUIREMENTS

prior to any manhole entry and will be used in generating the confined space entry permit(s) required for the project.

The contractor shall provide supplementary lighting for all manhole work.

(c) Excavation Permits:

The Contractor shall request and obtain excavation permit(s) prior to performing any excavation. KSC Form 26-312V3 NS, Utility Locate/Excavation Permit Request, shall be prepared by the Contractor and submitted to the Government for approval at least 15 working days prior to the planned excavation date. The Contractor shall comply with the requirements of the Base Support Contractor's "Utility Locate / Excavation Permit Instruction" ENG-I-MP07 (latest revision), in the preparation, submission and use of the permit(s).

J-B-2 FIRE PROTECTION AND REQUIRED PERMITS

The KSC Fire Department will provide fire suppression, inspection and rescue services to the Contractor as necessary. The Contractor shall:

- (a) Provide approved fire extinguishers of appropriate type for hazards involved.
- (b) Report all fires to the Fire Service at 867-7911 or 867-1911.
- (c) Comply with all requirements of KHB 1710.2C Section 504 (Heat Producing Devices) and NSS 1740.11 "NASA Safety Standard for Fire Protection" Section 702 and Chapter 8 for work performed at the Kennedy Space Center.
- (d) Provide a fire watch in accordance with Federal OSHA Safety and Health Standards 29 CFR 1926.352/1910.252 when required by the welding and burning permitting official.
- (e) Prevent false fire alarms by providing 24-hour advance notice to the Contracting Officer's Technical Representative (COTR) when construction activities in areas protected by fire alarm and/or detection systems may produce airborne particulates (smoke or dust) caused by construction activities such as painting, stripping, cutting drywall or concrete, sandblasting, and/or removing raised floor panels.
- (f) Request permits for all welding and burning operations. Requests for these permits shall be made in writing to the Government at least seven (7) working days in advance of the time required.
- (g) Report in the Contractor's Safety and Health Plan in accordance with NFS 1852.223-73 how it intends to comply with the above requirements.

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-B – KSC PROJECT SPECIFIC REQUIREMENTS

J-B-3 PERMANENTLY INSTALLED SAFETY SYSTEMS

- (a) The Contractor shall protect and in no way interrupt the service of any installed safety systems or personnel safety devices.
- (b) In the event that the Contractor requires entrance into systems serving safety devices, the Contractor shall obtain prior approval from the Contracting Officer. In the event the Contractor determines that it is necessary to temporarily remove or render inoperable any personnel safety devices in order to accomplish contract requirements, the Contractor shall provide alternate means of protection prior to removing or rendering inoperable any permanently installed safety devices or equipment and shall obtain prior approval of the Contracting Officer.

J-B-4 BREATHING AIR COMPATIBILITY

- (a) The contractor shall take precautions to assure that connectors used in contractor-supplied breathing air systems are incompatible with connectors present on either KSC gas systems or on contractor supplied systems that are used to supply non-respirable gases. KSC-STD-Z0008, 'Standard for Design of Ground Life Support Systems and Equipment', establishes requirements for connectors to be used in KSC facility breathing air and non-respirable gas systems. Facility breathing air systems located at KSC/CCAFS are to use a Hansen 3/8 inch quick disconnect as a breathing air distribution interface. KSC facility non-respirable gas systems are to use 1/4 inch quick disconnects for gas distribution interfaces. Although most facility systems were designed in accordance with this standard, there are nonconforming locations at KSC/CCAFS.
- (b) The Contractor may use KSC facility breathing air systems, if available at the work location. The contractor shall perform a pre-work site inspection to identify coupling types in use at the work location before mobilizing or using any breathing air equipment. The contractor shall also submit a written certification to show the contractor's breathing air system has been recently inspected and meets Grade D breathing air standards. Alternately, the contractor may arrange for on-site testing of contractor-supplied breathing air by the Government at least five days prior to start of work. In addition, the contractor shall also provide a work site evaluation for the NASA Safety Office to review before using any breathing air system. The breathing air test and the safety inspection can be coordinated through the Contracting Officer, and will be at no cost to the contractor.
- (c) The contractor shall tag or label connector ends of all lines and flexible hoses of contractor-provided breathing air or non-respirable gas distribution systems. The tags or labels will clearly identify the contents of the lines or hoses.
- (d) The contractor shall provide a description of the steps taken to comply with the requirements of this clause in their safety plan submittal.

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-B – KSC PROJECT SPECIFIC REQUIREMENTS

J-B-5 TRAFFIC RESTRICTIONS

- (a) The Contractor will not move oversized loads and/or slow moving vehicles on established roads within the Kennedy Space Center from 6:30 A.M. to 8:30 A.M. and 3:30 P.M. to 5:30 P.M. on week days. Other than the above restricted hours, the Contractor may move oversize and/or slow moving vehicles to the work site provided all requirements of the Florida State Highway Department have been met.
- (b) Movement of any Contractor vehicle in excess of maximum width, height and length specified by Florida Statutes Chapter 316 shall be accompanied by the Contractor's designated Convoy Commander. The Contractor's Convoy Commander shall be totally responsible for the oversized vehicular movement to include making a physical inspection for possible obstructions along the intended route and obtaining all required special permits.

J-B-6 STORAGE AND PROTECTION OF MATERIAL TO BE RE-USED

All items of material to be removed and re-installed by the Contractor shall be protected during removal and stored in a manner such that the material will not be damaged during removal or storage. Any material designated for re-use, which is not suitable due to the Contractor's damage, will be replaced by the Contractor at no additional cost to the Government.

J-B-7 MAINTENANCE OF GOVERNMENT EQUIPMENT

- (a) Government systems and equipment in the Contractor's work area may require servicing, maintenance, or modification by Government support contractors during the contract performance period. This maintenance activity may include work on systems, including underground utilities, that connect with Contractor installed systems and equipment. The Contractor shall allow the Government support contractors into his work area to perform the maintenance work.
- (b) Existing systems and equipment require periodic maintenance that cannot be readily defined in terms of frequency and duration. This maintenance will be coordinated with the Contractor through the Contracting Officer, and will be performed on a non-interference basis as much as possible. The Contractor shall notify the Contracting Officer regarding any uncoordinated maintenance activity.
- (c) The Contractor shall arrange and conduct a joint pre-operations briefing with Government support contractor personnel on each occasion that the support contractor requires access to the contractor's work area. The Contractor shall take the following steps as required to prevent collateral damage to, or interference with, Contractor installed systems and equipment.
 - (1) Verify the scope and limits of the support contractor's planned maintenance activity.
 - (2) Advise the support contractor regarding the scope of the Contractor's work that may be affected by the maintenance activity, including specific locations and dimensions of

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-B – KSC PROJECT SPECIFIC REQUIREMENTS

planned or installed facilities, systems and equipment. Notify the Contracting Officer immediately regarding any resulting conflicts or interferences.

- (3) Ensure that temporary barriers or protective measures are provided as needed to protect Contractor installed work and preserve job-site safety.

The Contractor shall notify the Contracting Officer immediately regarding any issues that cannot be resolved with the support contractor.

J-B-8 AVIATION OBSTRUCTION LIGHTS

The Contractor will provide at least two Aviation Red Obstruction Lights or two High Intensity White Obstruction Lights on all structures over 100 feet above ground level. All construction cranes/booms shall be lighted regardless of height. Lights must be constructed and installed in accordance with U.S. Department of Transportation, Federal Aviation Administration publication AC 70/7460-1F (as revised), Chapter 4, paragraph 15, subparagraph e. Lights will be operated during all periods of reduced visibility, between sunset and sunrise, and as directed by the Contracting Officer.

J-B-9 INTERFERENCES AND COORDINATION OF WORK

- (a) The Contractor shall coordinate construction layout, systems configuration and work scheduling to avoid interference's between the various construction trades and their installations. Interferences and obstructions resulting from lack of Contractor coordination shall be corrected by the Contractor as approved by the Contracting Officer. All components, fittings and reworking necessary for such corrections shall be provided by the Contractor at no additional cost to the government. Dimensions shown for existing work, and all dimensions required for work that is to connect to existing work, shall be verified by the Contractor by actual field measurement of the existing work. Any work at variance with that specified or shown in the drawings shall not be performed by the Contractor until approved in writing by the Contracting Officer.
- (b) To the extent possible, the as-built dimensions of all new work shall be verified by actual field measurement prior to ordering or fabricating mechanical, electrical, or specialty equipment and materials to be installed. If such field measurement is not possible, then the contract drawings and applicable shop drawings shall be checked by the contractor for dimensional accuracy prior to ordering or fabricating equipment and materials to ensure proper fit for field installation.
- (c) The Contractor shall be responsible for correction of all field fitup problems and interferences which could have been avoided by field measurement or drawing checks prior to equipment fabrication.

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-B – KSC PROJECT SPECIFIC REQUIREMENTS

J-B-10 RESTORATION OF GRASSED AREAS DISTURBED BY CONSTRUCTION

The Contractor shall, prior to completion of the contract, grass all areas disturbed by construction activities by seeding and mulching or, when erosion may occur, by sodding, except where specifically directed otherwise in the drawings and specifications.

J-B-11 TEMPORARY CONSTRUCTION TRAILERS

- (a) The Government will provide a location for temporary office and/or storage facilities if needed for performance of on-site work under this contract. Specific location(s) at or reasonably close to the work site will be identified at the pre-work conference. The contractor is responsible for providing his own telephone service and for making his own connections to KSC utility services, if provided for under Article I.9, KSC On-Site Facilities and Services.
- (b) All temporary facilities must be structurally sound, in roadworthy condition, and shall be installed and anchored in accordance with KSC-PLN-1904, Trailer/Equipment Tie Down Plan for the John F. Kennedy Space Center; or Rules of Department of Highway Safety and Motor Vehicles, Division of Motor Vehicles Chapter 15C-1, whichever is more stringent. Copies of the standards will be made available to the contractor at the pre-work conference. The contractor shall provide written certification of compliance for all temporary facilities to the Contracting Officer within three days of installation. Any facilities that fail to meet these requirements shall be immediately removed from Government property.
- (c) All temporary facilities shall be removed from government property within two weeks following final acceptance of work performed under this contract.

J-B-12 CONFINED SPACE WORK REQUIREMENTS

- (a) Special requirements, coordination, and precautions will apply to any contract work taking place in confined spaces. Each contractor contracted to perform work in confined spaces is required to provide a written program for such work as part of its health and safety plan which is consistent with the requirements of 29 CFR 1910.146. For work in telecommunications manholes, provisions of 29 CFR 1910.268(o) are also applicable. The contractor shall coordinate any such work in confined spaces with the KSC Environmental Health Support Contractor, KSC Fire Services Support Contractor, and any other resident government or contractor organization whose employees may have access to the work location. The provision of Environmental Health services by the government does not prohibit the contractor from providing their own atmospheric testing. Government provided services include environmental health monitoring and consultation support for testing of atmospheres in confined spaces as well as fire rescue and emergency medical services.
- (b) Entry into and work in confined spaces shall be in accordance with the requirements of KNPR 1820.4, “KSC Respiratory Protection Program,” KNPR 1840.19, “KSC Industrial Hygiene Handbook,” and all other applicable clauses of this contract.

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-B – KSC PROJECT SPECIFIC REQUIREMENTS

- (c) Confined spaces, which contain water, shall be pumped out by the contractor prior to scheduling a confined space entry check.
- (d) In addition to the requirements set forth above, the Contractor shall notify and obtain approval from the Power Coordinator, telephone 321-867-7300, and/or from Communications Control, telephone 321-867-4141, respectively, prior to performing work in electrical and/or communications manholes.

J-B-13 TESTING OF CONSTRUCTION MATERIALS

Tests of construction materials indicated to be performed by the Contractor shall be accomplished by the Contractor utilizing the services of an acceptable independent testing laboratory.

J-B-14 AFFIRMATIVE PROCUREMENT

Affirmative Procurement (AP) is the purchase of environmentally friendly products and services (i.e. products made from recycled or recovered materials). Federal agencies, their Contractors and subcontractors are required to maximize the purchase materials on the list of “EPA Designated Guideline Items” with the minimum recycled or recovered materials content whenever practicable according to RCRA 6002 and EO 13101. The requirements of RCRA 6002 include the following:

“The decision not to procure such items shall be based on a determination that such procurement items:

- (A) are not reasonably available within a reasonable period of time
- (B) fail to meet the performance standards set forth in the applicable specifications or fail to meet the reasonable performance standards of the procuring agencies and/or
- (C) are only available at an unreasonable price.

Any determination under subparagraph (B) shall be made on the basis of the guidelines of the National Institute of Standards and Technology in any case in which such material is covered by such guidelines.”

The Contractor shall provide AP approved items as specified within the contract documents. Submittals for AP items shall be provided for approval in accordance with Shop Drawing provisions. If the Contractor proposes to substitute an item that does not conform with AP requirements, the applicable Shop Drawing shall be accompanied by KSC Form 8-69, Contractor Request to Use Nonconforming Parts or Material (*Deviation/Waiver Request*) identifying the reason for the proposed substitution.

Non-conforming items without approved D/W's will be rejected and the contractor shall be responsible for any costs and schedule impacts associated with replacing such non-conforming items at no additional cost to the Government.

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-B – KSC PROJECT SPECIFIC REQUIREMENTS

At the conclusion of the project, the Contractor shall provide the Contracting Officer (CO) with a report itemizing all AP items used.

Detailed information on the EPA AP specified/approved products and manufacturers providing these products is available at www.epa.gov/cpg/products.htm.

J-B-15 SPILLS

The Contractor shall make all reasonable and safe efforts to contain and control any spills or releases that may occur. The Contractor shall immediately report (by phone) any occurrence of a pollution incident or spill, first to the Emergency 911 (321-867-7911 from a non 867/861 exchange), then to the Contracting Officer (CO). The Contractor shall document the incident or spill on KSC Form 21-555, "Pollution Incident Report," and submit it to the CO and NASA Environmental Assurance Branch (EAB), TA-B1B, within 24 hours of the incident.

The Contractor shall provide spill response materials to contain and control spills including, but not limited to, containers, absorbent material, shovels, and personal protective equipment. Spill response materials shall be available at all times in which materials/wastes are being handled or transported. Spill response materials shall be compatible with the type of material being handled.

The KSC Spill Cleanup Team will be responsible for the final cleanup and validation of a spill or release.

The Contractor's prompt action to minimize the impacted area and to timely report any occurrence will increase the Spill Cleanup Team's ability to complete the spill cleanup and therefore reduce the Contractor's liability for a larger cleanup.

J-B-16 WEEKLY STATUS MEETING

The Contractor shall attend a weekly progress/status meeting to be scheduled by the Contracting Officer for the purpose of determining progress status, delaying factors, material delivery schedules, and status of shop drawing submittals. In addition, a representative of each first tier subcontractor may be required to be present for the conference.

J-B-17 SUPERINTENDENT ASSIGNMENT

Working Superintendent: Pursuant to FAR clause 52.236-6, entitled "Superintendence by the Contractor," the Contractor shall assign a superintendent, on the Contractor's payroll, whose primary responsibility will be to superintend the work and who has the authority to act for the Contractor. One or more alternate superintendents, each with full authority to supervise the work, shall be designated in writing and approved by the Contracting Officer. The superintendent or an alternate shall be physically present at each work site at all times during performance of the contract and until the work is completed and accepted.

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-B – KSC PROJECT SPECIFIC REQUIREMENTS

The individual(s) appointed as superintendent(s) shall complete the OSHA 10 hour Construction Course prior to starting any field work on the project. The class shall be taught by an authorized provider of the course (e.g., United Safety Council, Florida Safety Council) and be attended in person. The appointed superintendent(s) shall provide the course completion certificate to the government stating the required training and testing was satisfactorily completed and the date of completion. The course completion date shall not be greater than 5 years from the start of the contract.

J-B-18 MATERIAL SAFETY DATA SHEETS (MSDS) SUBMITTAL/CHEMICAL INVENTORY REPORTING AND MANAGEMENT

The Contractor shall provide a complete and accurate list, accompanied by the applicable Material Safety Data Sheets (MSDS), of all materials and chemicals listed on the Consolidated List of Chemicals Subject to the Emergency Planning and Community Right-To-Know Act (EPCRA) and Section 112(r) of the Clean Air Act that will be stored onsite and/or used in the execution of this contract, regardless of the quantity. This information shall be provided to the Contracting Officer (CO) prior to the time of delivery of the materials and chemicals to the site. This inventory is to be updated and resubmitted to the CO on a monthly basis. All inventory reporting is to be completed on the Chemical Inventory for Construction Projects at Kennedy Space Center Form (8-313NS). Appropriate labels and MSDS shall be provided for all chemical shipments.

J-B-19 WASTE CHARACTERIZATION

KSC Form 26-551 "Process Waste Questionnaire" (PWQ) shall be prepared and processed for all waste streams generated during the execution of this project in accordance with article entitled "Hazardous Wastes".

J-B-20 GOVERNMENT PROPERTY TO BE INSTALLED BY THE CONTRACTOR

In Association with the work to be performed under this contract, the Government will provide the property identified below to be installed by the Contractor. The property will be provided by the Government within 60 days after issuance of the Notice To Proceed (NTP)

Description	Quantity	Estimated Value	Condition
Citec Software Key	4	\$26,800	New
Industrial Network Switch	9	\$10,800	New

J-B-21 CONCRETE WASTEWATER

☒ LIGHTWEIGHT CONCRETE

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-B – KSC PROJECT SPECIFIC REQUIREMENTS

Reference contract article entitled “**Hazardous Wastes**”. The use of light-weight concrete materials has been confirmed to have the potential to be hazardous due to pH but may also exhibit other hazardous characteristics depending upon processes and products used. The contractor shall not allow wastewater from light-weight concrete construction activities (such as on-site material processing; concrete curing; concrete clean-up; and water used in concrete trucks, forms, etc.) to enter waterways or to be discharged on the ground before being analyzed for hazardous waste characteristics. A representative sample shall be collected from the first "flush" of light-weight concrete wash water waste at the time of generation, and will be analyzed by the government for hazardous waste characteristics. Pending completion of this analysis, all such waste water shall be containerized, labeled, and handled in accordance with the “**Unknown Wastes**” in “**Hazardous Waste**” article.

If the waste wash water from light-weight concrete usage is determined to be hazardous, it shall be handled, stored, labeled, and managed as hazardous waste in accordance with RCRA regulatory requirements and applicable contract provisions.

If the analysis shows the wash water is not hazardous, this wash water waste and any additional wash water waste generated at the same job using the same product and process may be handled as described under “**Concrete Washout**” paragraph above.

J-B-22 TOXIC METALS

Representative samples of painted surfaces within the project area have been identified to contain toxic metals. The Contractor shall assess hazards and brief government of their proposed methods of removal and disposal of building materials identified as having toxic coatings and hazardous materials. The Contractor’s hazard assessment shall be conducted by a competent health and safety professional. The Contractor shall notify the Contracting Officer of hazard mitigation activities and abatement procedures 14 days prior to disruption to any suspected area.

J-B-23 PCB MANAGEMENT

Polychlorinated Biphenyls (PCB) wastes may include, but are not limited to, oil-filled transformers, Oil-contaminated transformer concrete pads, light ballasts, capacitors, electric motors, pumps and paint coatings. PCB wastes shall be managed in accordance with 40 CFR 761. PCB waste management and disposal shall be coordinated through the Contracting Officer (CO), a KSC Form 26-551 "Process Waste Questionnaire" (PWQ) and Technical Response Package (TRP) shall be prepared and processed in accordance with article entitled “**Hazardous Wastes**”.

Government Assistance – KSC has established procedures for the handling, storage and disposal of PCB contaminated waste streams generated on the Center. To aide with proper compliance of site-specific requirements, the Government will assign a NASA Environmental Point of Contact (EPOC) for each project. The establishment of the NASA provided EPOC in no way relieves the contractor for compliance with requirements defined in 40 CFR 761.

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-B – KSC PROJECT SPECIFIC REQUIREMENTS

LIQUIDS CONTAMINATED WITH PCBs

PCB containers storing liquid PCBs at concentrations of 50 parts per million (ppm) or greater shall be removed from the generator accumulation site within **24 hours** from the date the PCB item was removed from service. This support shall be coordinated through the Contracting Officer for waste pickup scheduling **before** removal from service. The Contractor shall contact the Contracting Officer for pick-up and removal of all PCB related waste. The Contractor shall not remove any oil filled transformers from KSC. Unless analysis results determine PCB content in oil less than 2 ppm, the contractor shall coordinate any disposal of liquid PCBs through the Contracting officer.

For Equipment containing PCB concentration in OIL \geq 500 ppm

LIQUIDS: Drained oil must be stored in a DOT approved container and marked with a PCB label (with the date the equipment was removed from service). Containerized liquid PCB waste must be moved to PCB storage facility **immediately (within 24 hrs)**. Coordinate effort through EPOC - 5 day notice prior to removal from service is required.

CARCASS or CONTAINER: Drained equipment must be marked with a PCB label (with the date the equipment was removed from service), stored on an impervious surface, covered from rain, and moved offsite within 30 calendar days.

For Equipment containing PCB concentration in OIL >50 ppm but < 500 ppm

LIQUIDS: Drained oil must be stored in an adequate container on an impervious surface, covered from rain, labeled, and moved offsite within 14 calendar days.

CARCASS or CONTAINER: Drained equipment must be stored on an impervious surface, covered from rain, labeled with PCB mark, dated and moved offsite as soon as practicable (not to exceed 180 days). If carcass paint is analyzed for PCBs and results < 50 ppm - No storage, marking, or dating requirement are required under TSCA regulations. Provide analysis results to RRMF along with KSC 7-49 form to recycle.

PCB BULK PRODUCT WASTE (SOLIDS)

PCB Bulk Product Waste is defined in 40 CFR 761.3 as waste derived from manufactured products containing PCBs in a non-liquid state at any concentration, where the concentration of PCBs at the time of designation for disposal is greater than or equal to (\geq) 50 ppm. The contractor shall dispose of all coated waste with a PCB concentration over the 50 ppm limit in the Schwartz Road landfill (see Schwartz Road Landfill Article). NASA requires all contractors generating metal-based waste containing PCB contaminated coatings with PCBs ≤ 50 ppm to recycle this material (see Recycling and Salvaging Article). If these materials cannot be recycled due to excessive cost in segregation or handling, the contractor shall dispose of this waste in the same manner as PCB Bulk Product Waste.

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-B – KSC PROJECT SPECIFIC REQUIREMENTS

All protective coatings that contain PCB shall be handled in accordance with the requirements of this section. Where Material Safety Data Sheets for protective coatings are available and indicate the presence of PCBs, sampling is not required. Where the presence of PCBs is not determined before work begins, PCBs shall be assumed to be present.

The following waste generator standards will be used for the accumulation and storage of PCB waste materials:

- a. PCB wastes listed below may be stored temporarily at a waste generator accumulation site for up to thirty (30) days from the date removed from service. The container and labeling shall comply with the TRP. The date the PCB item was removed from service shall be marked on the container label per the TRP.
 - (1) Non-leaking articles and equipment. PCB articles are manufactured articles containing PCBs whose surfaces have been in direct contact with PCBs. These articles include capacitors, transformers, electric motors, and pumps.
 - (2) Leaking articles and equipment placed in non-leaking PCB containers with sufficient materials to absorb any liquid PCBs remaining in the item. PCB containers are any devices used to contain PCBs or PCB articles whose surfaces have been in direct contact with PCBs.
 - (3) PCB containers storing non-liquid PCB wastes such as contaminated soil and debris.
- b. PCB containers storing liquid PCBs at concentrations of 50 parts per million (ppm) or greater shall be removed from the generator accumulation site to the PCB Storage Building (K7-115) within 24 hours from the date the PCB item was removed from service. Support shall be coordinated through designated KSC Waste Management personnel for waste pickup before removal from service date to allow for waste pickup scheduling and to avoid regulatory violations. The Contractor shall contact KSC Waste Management for pick-up and removal of hazardous/PCB waste. Documentation including the waste type, quantity, locations, and organization responsible for the waste shall be provided on KSC Form 28-809 “Waste Support Request” to KSC Waste Management when requesting waste disposal. The Contractor shall fax the waste support request to KSC Waste Management at fax 867-9466.

The Contractor shall not remove any oil filled transformers from KSC. The Contractor shall only take drained transformers to the Reutilization, Recycling and Marketing Facility (RRMF) (M6-1671) at Ransom Road. Within the six (6) month period prior to delivery to RRMF, transformers shall have an oil analysis showing PCB content. At the request of the Contractor, the CO will arrange for all sampling and testing to determine the proper handling and disposal of the transformers. If the oil sample is greater than 500 ppm, the transformer shall be removed as a hazardous/PCB waste. Within 48 hours of having the transformer ready for disposal, the Contractor shall contact the EPOC assigned to the project to coordinate with KSC Waste

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-B – KSC PROJECT SPECIFIC REQUIREMENTS

Management for pick-up and removal of hazardous/PCB waste. Documentation including the waste type, quantity, locations, and organization responsible for the waste shall be provided on KSC Form 28-809 "Waste Support Request" to KSC Waste Management when requesting waste disposal. The EPOC shall fax the waste support request to KSC Waste Management at fax 867-9466. At the request of the Contractor, the EPOC will arrange for all sampling and testing to determine the proper handling and disposal of the stained or painted concrete. Lab analysis that is older than 6 months will not be considered valid analysis and re-sampling must be completed.

J-B-24 HAZARDOUS WASTES

Hazardous and controlled waste shall be managed in accordance with all applicable statutes, rules, orders, and regulations which may include but are not limited to 40 CFR Parts 260 - 268, 273, 279, 761 and KNPR 8500.1 KSC Environmental Requirements. All hazardous waste generated during the execution of this contract shall be disposed of by the Government. Unless directed by the Contracting officer, in no case shall the Contractor or the Contractor's representative transport hazardous waste from KSC.

The Contractor shall be responsible for identifying processes and operations and the location and nature of all potentially hazardous and controlled waste and their containers, as defined in 40 CFR Parts 261, 273, 279, or 761. KSC has established policies and procedures in place to assist the contractor for characterization, handling and storage of wastes generated on KSC. Any request for assistance shall be in writing and submitted to the Contracting officer.

Contractor personnel generating and managing the waste shall have hazardous waste training per 40 CFR 265.16. The Contracting Officer may at any time during the course of the contract performance period require the Contractor to provide individual training records for any employee involved in the performance of this contract, and the contents of the course or courses completed to satisfy the training requirements. Attendance at KSC Training Course QG-211 "Hazardous Waste Management" will satisfy the above training requirements.

The Contractor shall prepare copies of Material Safety Data Sheets (MSDS) for each material utilized on the project and provide copies to the Contracting Officer (CO) thirty (30) days before the start of the waste generation process. No substances shall be delivered to KSC without the appropriate Material Safety Data Sheets.

GOVERNMENT ASSISTANCE

KSC has established procedures for the handling, storage and disposal of hazardous waste. To aide with proper compliance of site-specific requirements, the Government will assign a NASA Environmental Point of Contact (EPOC) for each project. The EPOC shall, upon request, assist with waste hazard determination, packaging, labeling, and disposal requirements for waste generated on KSC. The establishment of the NASA EPOC in no way relieves the contractor for compliance with requirements defined in 40 CFR Parts 261, 273, 279, or 761.

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-B – KSC PROJECT SPECIFIC REQUIREMENTS

WASTE CONTAINERS

The Government will provide DOT compliant storage containers and labels upon request. The Contractor shall request the storage containers, by providing quantity and type needed, in writing to the Contracting Officer a minimum of one week before the required need date. The containers will be available for pickup by the Contractor at a location designated by the Contracting Officer. For projects that will be generating large quantities of waste (>500 gallon or 75 cu ft), a two week notice must be provided to the CO to ensure availability of waste containers. The Contractor shall be responsible for transporting the containers from storage location to the project site.

SATELLITE WASTE ACCUMULATION AREA (SAA)

The Contractor shall establish an on-site Satellite Waste Accumulation Area within 50 feet (ft) of and within sight of any point where hazardous or controlled wastes may be generated. If a Satellite Waste Accumulation Area must be more than 50 ft from the point of generation, or out of sight of the generator, the Contractor shall provide a written request to the CO fourteen (14) days before the start of the waste generating process. The CO will send a notification to the NASA Environmental Assurance Branch (EAB), TA-B1B, for their review and concurrence. The EAB will then request approval for a non-routine Satellite Waste Accumulation Area from Florida Department of Environmental Protection. The Contractor shall not place the Satellite Waste Accumulation Area in service before receiving written approval of the variance from the CO. The Contractor shall store potential or identified hazardous and/or controlled wastes in the appropriate properly labeled containers inside the Satellite Waste Accumulation Area in accordance with KNPR 8500.1 (as revised).

UNKNOWN WASTES

If during the course of the project unidentified waste is discovered by the contractor or subcontractors, the contractor shall immediately contact the Contracting Officer and handle the waste as hazardous. The contractor shall not attempt to move, open or test any unknown commodities.

If a hazardous/nonhazardous waste determination cannot be made by process knowledge and no MSDS is available for the waste stream, the container of waste shall be marked with a Hazardous Waste Determination In Progress (HWDIP) label until chemical analysis is completed. At the request of the Contractor, the CO and EPOC will provide any analytical support required by the TRP. The EPOC will arrange for all sampling and testing of potentially hazardous or controlled waste.

If the material is hazardous, the analysis completion date serves as the accumulation start date (ASD). Waste streams labeled with HWDIP labels are a potentially hazardous waste stream; therefore they must be managed as a hazardous waste. In order to fulfill this

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-B – KSC PROJECT SPECIFIC REQUIREMENTS

requirement, the generator shall manage those containers in a Satellite Waste Accumulation Area or 90-day storage area. HWDIP waste generated in amounts less than 55 gallons may be managed as a satellite container. If HWDIP waste is generated in amounts greater than 55 gallons, the additional volume must be moved within 72 hours to a 90-day storage site.

UNIVERSAL WASTES (UW)

For items meeting the definition of UW, the Contractor shall handle, collect and manage in accordance with 40 CFR 273 and Chapters 62-730 and 62-737 FAC. The EPA established Universal Waste regulations to ease the requirements for managing hazardous wastes that can be recycled. Waste streams currently adopted by the State for management as UW are rechargeable batteries, mercury-containing lamps and devices, capacitors, and certain pesticides.

The Contractor's representative or "Handler" of UW shall be trained for the proper waste handling and emergency response procedures. Attendance at the KSC training course QG-299 "Universal Waste Rule" will satisfy the above. The Contractor shall provide to the CO training records of any "handler" of UW upon request of the CO.

J-B-25 RECYCLING AND SALVAGING MATERIALS

The Contractor shall divert all of the following Construction and Demolition (C&D) waste items from the list below from disposal at landfills and incinerators to facilitate their recycling or reuse. The Contractor shall require all subcontractors, vendors, and suppliers to participate in this effort.

CONTRACTOR PROPERTY

All materials and real property items identified below shall become property of the contractor at the NTP. The Contractor may, at his discretion, assume ownership of and recycle all other Construction and Demolition Debris that has not been identified for salvage in the Contract Documents, or has otherwise been designated as Government property. All recyclable material obtained by the Contractor for recycling shall be removed from the Kennedy Space Center and recycled; it shall not be stockpiled at the Kennedy Space Center. The Contractor shall assume ownership of these recyclable materials once they are transported off of the Kennedy Space Center.



ELECTRICAL, OFFICE, AND OTHER EQUIPMENT

These items require inspection by RRMF/Environmental Management Branch recycling personnel to provide proper disposition of material. Electrical equipment (transformers / switchgear / panels / disconnects.....) disposition will be made on a case by case basis based on level of contamination and value.



METALS: ALUMINUM, BRASS, COPPER, REBAR, STAINLESS STEEL, STEEL, OTHER FERROUS, OTHER NON-FERROUS, SCRAP

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-B – KSC PROJECT SPECIFIC REQUIREMENTS

METAL

All metals coated with non-liquid PCB paints with levels below 50 parts per million shall be recycled by the contractor. Any metals coated with non-liquid PCB paints with levels above 50 ppm shall utilize the Schwartz Road Landfill after Government approval.

REPORTING REQUIREMENT

The Contractor shall record C&D waste materials on the “Construction & Demolition Projects Report”, KSC Form 7-648 NS (02/07) and submit the form on a monthly basis and keep log on site per direction of the Contracting Officer (CO).

J-B-26 SOLID WASTE

The Contractor shall be responsible for the proper management of all solid waste generated at the Kennedy Space Center from the execution of this contract. The Contractor shall segregate and transport all solid waste to disposal locations designated in the Contract Documents. The Contractor shall police work areas daily for loose trash and debris. The Contractor shall collect and properly dispose of wind-blown debris daily to prevent migration of debris/trash offsite.

Trash items not requiring special handling, or which cannot be resold or recycled, shall be disposed of in receptacles slated for disposal in either the KSC Landfill or the Brevard County Landfill. The Kennedy Space Center has numerous policies and processes in place to properly categorize, handle, store and dispose of waste streams generated during the project. It is the contractor’s responsibility to make every effort to reduce the impact of the project on the environment. This includes utilizing all practical means to reduce the amount of waste that is landfilled or incinerated.

J-B-27 DIVERTED SOLID WASTE

The Contractor shall dispose of the following solid wastes at onsite KSC disposal facilities: Soils, Trees / tree remains, Vegetative material, Non-pressure treated wood, Dimensional non-pressure treated lumber, Pallets (Unserviceable Wood), Blast Media (non-hazardous), and **clean non-coated concrete**. The contractor shall segregate clean, unpainted concrete from other Construction and Demolition Debris and deliver it to the Kennedy Space Center’s Diverted Aggregate Recycling and Collection Yard (DARCY). The DARCY is located west of the Schwartz Road Landfill entrance. The Government shall retain ownership of all material delivered to the DARCY. EPOC shall provide DARCY operating plan upon request.

J-B-28 SCHWARTZ ROAD LANDFILL OPERATIONS

The KSC Landfill is an unlined Class III landfill. Any waste permitted by DEP regulations for disposal in a Class III landfill as defined in Rule 62-701.200(14), FAC can be accepted at the landfill (**excluding friable asbestos**). For the purpose of meeting recycling, waste diversion and

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-B – KSC PROJECT SPECIFIC REQUIREMENTS

reuse goals, KSC has restricted certain solid waste from landfill disposal (See *Article J-B-26, Recycling and Salvaging Materials*). Landfilling of waste shall be the Contractor's last option for disposal. Hours of operation are 0730 hours to 1100 hours and from 1200 hours to 1500 hours on Tuesday and Thursdays, excluding holidays.

The physical dimensions of the waste shall be within the handling capabilities of the landfill disposal equipment. The physical dimensions for the landfill handling capabilities are 8 feet in length x 8 feet in width. Only the following items listed will be accepted at the landfill:

- (1) Asphalt: Asphalt removed from parking lots, driveways, and roadways.
- (2) Blast Media: The blast media must be as free from debris as possible and determined nonhazardous for acceptance into the KSC Landfill. The Spent Sandblast Media Disposal Form must accompany the blast media to the landfill and will be reviewed by the landfill operator. Blasting media determined to be a hazardous waste must be managed as hazardous waste.
- (3) Carpeting
- (4) Construction and Demolition Debris: Materials considered not water soluble and non-hazardous in nature, including but not limited to steel, brick, glass, concrete, asphalt, pipe, gypsum wallboard and non-pressure treated or unpainted lumber. This also includes rocks, soils, tree remains and other vegetative matter, which normally result from land clearing or development. Scrap metal from demolition projects should be managed according to guidance provided under article entitled "Recycling and Salvaging Materials". The landfill may not accept any painted materials that test above the lower Toxicity Characteristic Leaching Procedure (TCLP) detection limits for barium, cadmium, chromium, lead, and mercury. If TCLP results are above the lower TCLP detection limits, the Contractor shall submit a PWQ for evaluation per article entitled "Hazardous Wastes."
- (5) Fiberglass
- (6) Glass (except light bulbs or lamps).
- (7) Non-Friable Asbestos: Non-friable asbestos, also referred to as Non-Regulated Asbestos Containing Materials (NRACM) is handled on a case-by-case basis. KSC policy allows for the disposal of NRACM only. In order to dispose of non-friable asbestos, the Contractor shall complete and submit the KSC/Schwartz Road Landfill Non-Friable Asbestos form (KSC 28-1084 NS), which can be obtained from the Contracting Officer (CO) or the CO's designee. The form shall be sent to NASA EAB, TA-B1B. The following scheduling procedures shall be followed before NRACM wastes are accepted at the landfill:

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-B – KSC PROJECT SPECIFIC REQUIREMENTS

- a. The waste generator/hauler shall make arrangements with the landfill operator a minimum of 24 hours before disposal of NRACM waste and shall inform the operator of the quantity of the waste and the scheduled date the shipment will arrive at the landfill.
 - b. NRACM will be accepted at the landfill with prior arrangement with the scale house attendant (minimum of 24 hours notification) Tuesday and Thursday, excluding holidays, from 0730 hours to 1100 hours and from 1200 hours to 1400 hours. Regulated waste will not be accepted later than 1400 hours.
- (8) Pallets (Unserviceable Wood and Plastics): Pallets that are not reusable or recyclable are accepted.
- (9) PCB Bulk Product Waste: Refer to Clause “PCB Management.”
- (10) Wood: Miscellaneous non-pressure treated wood items are accepted.
- (11) Yard Waste (Vegetation): Vegetation from maintenance and land clearing activities is accepted.

J-B-29 ASBESTOS-CONTAINING BUILDING MATERIALS

Asbestos Containing Materials (ACM) are known to be present in facilities and or structures assigned under the scope of this contract. The Government will provide information regarding the location and quantity of known ACM in the facilities under this contract to the Contractor through the Contract Documents.

The contractor shall employ asbestos abatement contractors licensed by the State of Florida in accordance with Florida Statute 469 Asbestos Abatement. This documentation must be available onsite and shall be provided to the Government or Government representative upon request.

The Contractor shall abate all RACM as shown or specified in the contract documents and shall notify the Contracting Officer if any undocumented ACM or suspected ACM is encountered. The Contractor shall provide a written Asbestos Management and Abatement Implementation Plan which is consistent with the requirements of Federal and State regulations. These regulations include the Occupational Health and Safety Administration (OSHA) regulation 29 CFR 1926.1101, the Code of Federal Regulations (CFR) National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 61 Subpart M, the Florida Administrative Code (FAC) requirements FAC 62-257, and the Florida Statute (F.S.) 469 Asbestos Abatement and F.S. 376.60 Asbestos Removal Program Inspection and Notification Fee.

If more than 260 linear feet, 60 square feet or 1 cubic meter of RACM is to be removed, or any load-bearing structure is to be demolished regardless of whether or not asbestos is present, the Contractor shall submit to the Florida Department of Environmental Protection (FDEP) a “Notice

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-B – KSC PROJECT SPECIFIC REQUIREMENTS

of Asbestos Renovation and Demolition Form” (DEP Form 62-257.900(1). This notice shall be submitted two (2) weeks before demolition. A copy of the notification shall be provided to the Contracting Officer (CO) and the NASA Environmental Assurance Branch (EAB), TA-B1B. This notice shall be submitted for asbestos abatement and/or demolition of any load-supporting structural member. The State asbestos removal program requirements of F.S. 376.60 and the renovation or demolition notice requirements of the NESHAP 40 CFR Part 61, Subpart M, as embodied in FAC 62-257 are included on this form. If a project will disrupt construction materials in any way, the Contractor shall complete an asbestos survey. If it is unknown if ACM exist, the Contractor shall contact the COTR to complete a Support Request (KSC Form 19-15) to have KSC Environmental Health provide an asbestos survey.

Asbestos materials must be handled, packaged, labeled and disposed of per EPA 40 CFR 61 and OSHA Construction Standards 29 CFR 1926.1101. All regulated asbestos waste shall be disposed of at the Brevard County Landfill located on Adamson Road in Cocoa, Florida. Non-friable asbestos can be disposed of at the KSC Schwartz Road Landfill in accordance with Environmental Procurement Clause “Schwartz Road Landfill Operations.”

J-B-30 UNIQUE PROJECT SPECIFIC REQUIREMENTS

☒ **OCCUPANCY DURING CONSTRUCTION**

Facilities adjacent to the work site will be fully occupied during the construction. Care must be taken as to not disturb or interfere with existing Government operations or employees.

☒ **PROTECTIVE BARRIERS**

Protective barriers shall be erected to protect Government personnel.

☒ **CONTROLS INTEGRATION MEETINGS**

This integration shall include meetings where attendance is required for the following parties: prime contractor and controls subcontractor. Government representatives shall include: the Contracting Officer, Contracting Officer Technical Representative, Project Manager, Architect & Engineer, Inspector, and Customer representative. Equipment manufacturer representatives may also be asked to attend these meetings. The Prime Contractor will have ultimate responsibility for the full integration of all controls for this project.

See Specification Section: 23 09 23. 13 20

J-B-31 PROJECT PHASING

Due to the sensitivity of many of the facilities affected by this controls system modification, the contractor will be required to follow the phasing plan described on sheet V-04 of 79K38825, unless otherwise directed by the contracting officer. Phase I work is stand alone and is not

NASA/KSC SOLICITATION NNK12435778R
ATTACHMENT J-B – KSC PROJECT SPECIFIC REQUIREMENTS

dependent upon the other Phases however it shall be completed prior to beginning the installation of Phase 2. Phase 2 is the beginning of work that will affect all of the subsequent Phases and shall be 100% complete and accepted by the government prior to moving on to Phase 3. Phase 2 will also be treated as a “path finder” for both the contractor and the government to establish proper work procedures and build on lessons learned before moving on to the subsequent phases. The following items will be verified for proper operation within Phase 2;

1. Local PLC Controls
2. Local HMI graphics
3. Server installation and functional at IACP
4. Work Station installed and functional at IACP
5. All associated graphics are complete
6. Perform a functional test as spelled out in the design requirements document.

After successfully proven correct operation of Phase 2, Phases 3-9 of the project may be worked in parallel, with proper coordination with the government, however only one building may be completely down at one time. For example, while the DDC system is being removed in Phase 3, the PLC rack for Phase 4 can be assembled and tested at the factory but the DDC system cannot be removed from Phase 4 until Phase 3 is 100% complete and accepted by the government. At no time will the existing DDC systems in two facilities be down simultaneously. Phase 10 work shall not begin until Phases 1-9 are complete and accepted by the government.

J-B-32 FIELD OFFICE TRAILER

If the contractor requests a location for a field office trailer, 120/240 Volt power will be available in the vicinity of the office location. The contractor will be responsible for extending and connecting power to the field office trailer from the closest available connection point.

J-B-33 PROJECT PHASING AND OUTAGE COORDINATION

The contractor will be required to coordinate, all facility outages with the government in order to minimize impact to facility occupants. Any outage that requires shutting down the HVAC system to a facility shall be required to be done over weekend and/or holidays. Short HVAC outages of four hours or less shall be scheduled for second shift.

The contractor shall modify staffing levels and work extended work weeks to maximize work performed during HVAC outages. The Contractor will not be entitled to additional payment for working irregular hours due to outages.

If Option #1 is awarded, dedicated HVAC outages will be required to relocate the chilled water loop valves at all eight facilities on the chilled water line loop. These outages must be coordinated with the government and must be performed during the weekend and/or holidays during the period of performance to minimize interference with the facility operations.